Undergraduate University Catalog 2020-2021

University of Pittsburgh

Academic Calendar

University of Pittsburgh

ACADEMIC CALENDAR • 2020-21

Dates highlighted in yellow apply to all schools, on all University campuses. Those in blue apply only to the Pittsburgh campus.

Official dates for degrees awarded apply to all schools, on all University campuses. Specific dates affecting the professional programs in the Schools of Dental Medicine, Law, Medicine, Pharmacy, and Joseph M. Katz Graduate School of Business, as well as graduate programs with specialized accreditation requirements may be obtained from the appropriate Dean's Office.

* Employees covered by the collective bargaining agreements will be governed by the terms of those agreements.

NOTE: THE UNIVERSITY RESERVES THE RIGHT TO MAKE SUCH CALENDAR CHANGES AS IT DEEMS NECESSARY

☑ **All Campus Dates** ☑ **Pittsburgh Campus Only** Mix-in: All, None

August 2020

Begins			Ends		Campus
8/5/2020	Wednesday	Office of International Services (OIS) Graduate and Professional Student Orientation	8/5/2020	Wednesday	Pittsburgh Campus
8/5/2020	Wednesday	Summer 12-WEEK, 6-WEEK-2, 4-WEEK-3 sessions grades must be approved by instructors by 11:59 p.m.	8/5/2020	Wednesday	Pittsburgh Campus
8/8/2020	Saturday	Official date for awarding degrees	8/8/2020	Saturday	All Campuses
8/8/2020	Saturday	Summer Term Ends: Final examinations scheduled during last class meeting	8/8/2020	Saturday	All Campuses
8/9/2020	Sunday	Residence halls close	8/9/2020	Sunday	Pittsburgh Campus
8/12/2020	Wednesday	Summer Term grades must be approved by instructors by 11:59 p.m	8/12/2020	Wednesday	Pittsburgh Campus
8/12/2020	Wednesday	International Undergraduate Student Orientation	8/14/2020	Friday	Pittsburgh Campus

8/13/2020	Thursday	New Faculty Orientation	8/13/2020	Thursday	Pittsburgh Campus
8/13/2020	Thursday	Residence halls open	8/13/2020	Thursday	Pittsburgh Campus
8/14/2020	Friday	New Teaching Assistant Orientation	8/14/2020	Friday	Pittsburgh Campus
8/16/2020	Sunday	Welcome Week	8/18/2020	Tuesday	Pittsburgh Campus
8/17/2020	Monday	New Graduate and Professional Student Orientation	8/17/2020	Monday	Pittsburgh Campus
8/18/2020	Tuesday	New First-Year and Transfer Student Convocation	8/18/2020	Tuesday	Pittsburgh Campus
8/19/2020	Wednesday	Fall Term enrollment period ends for all students	8/19/2020	Wednesday	All Campuses
8/19/2020	Wednesday	Fall Term classes begin remotely	8/19/2020	Wednesday	All Campuses

September 2020

Begins			Ends		Campus
9/4/2020	Friday	Fall Term add/drop period ends at 11:59pm ET (no extended drop period this semester)	9/4/2020	Friday	All Campuses
9/7/2020	Monday	Labor Day (University open, classes in session)	9/7/2020	Monday	All Campuses
9/9/2020	Wednesday	Faculty Assembly	9/9/2020	Wednesday	Pittsburgh Campus
9/14/2020	Monday	Fall term classes continue in-person where appropriate	9/14/2020	Monday	Pittsburgh Campus
9/17/2020	Thursday	Constitution Day	9/17/2020	Thursday	Pittsburgh Campus
9/17/2020	Thursday	Senate Council	9/17/2020	Thursday	Pittsburgh Campus
9/25/2020	Friday	Family Weekend	9/26/2020	Saturday	Pittsburgh Campus

October 2020

Begins			Ends		Campus
10/7/2020	Wednesday	Faculty Assembly	10/7/2020	Wednesday	Pittsburgh Campus
10/14/2020	Wednesday	Student Self-Care Day (no classes)	10/14/2020	Wednesday	All Campuses
10/15/2020	Thursday	Senate Council	10/15/2020	Thursday	Pittsburgh Campus
10/20/2020	Tuesday	Fall Term deadline for students to submit Monitored Withdrawal forms to Dean's Office	10/20/2020	Tuesday	All Campuses
10/20/2020	Tuesday	Final Exam Conflict Form Submission Deadline	10/20/2020	Tuesday	All Campuses **(Guidelines)**
10/23/2020	Friday	Spring Term enrollment appointments begin (Veteran Students)	10/23/2020	Friday	All Campuses
10/23/2020	Friday	Homecoming Activities	10/24/2020	Saturday	Pittsburgh Campus
10/26/2020	Monday	Spring Term enrollment appointments begin (Non-Veteran Students)	10/26/2020	Monday	All Campuses

November 2020

Begins			Ends		Campus
11/3/2020	Tuesday	Election Day (classes in session)	11/3/2020	Tuesday	All Campuses
11/4/2020	Wednesday	Faculty Assembly	11/4/2020	Wednesday	Pittsburgh Campus
11/6/2020	Friday	Last day for Spring Term enrollment appointments	11/6/2020	Friday	All Campuses
11/7/2020	Saturday	Spring Term open enrollment period begins	11/7/2020	Saturday	All Campuses
11/12/2020	Thursday	Senate Council	11/12/2020	Thursday	Pittsburgh Campus
11/20/2020	Friday	Fall Term: Last day for undergraduate day classes	11/20/2020	Friday	All Campuses
11/21/2020	Saturday	Reading Day	11/21/2020	Saturday	All Campuses
11/23/2020	Monday	Final examination period for undergraduate day classes, In-Person Finals only	11/24/2020	Tuesday	Pittsburgh Calendar
11/25/2020	Wednesday	Thanksgiving Recess for students (no classes), all	11/29/2020	Sunday	

		schools			All Campuses
11/26/2020	Thursday	Thanksgiving Recess for faculty and staff (University closed)	11/27/2020	Friday	All Campuses
11/30/2020	Monday	CGS, Saturday Only, graduate, and evening classes meet remotely during this period;final exams held last scheduled class	12/5/2020	Saturday	Pittsburgh Campus
11/30/2020	Monday	Final examination period for undergraduate day classes, Remote Finals only	12/3/2020	Thursday	Pittsburgh Campus
11/30/2020	Monday	Thanksgiving Recess for Staff	11/30/2020	Monday	All Campuses

December 2020

Begins			Ends		Campus
11/30/2020	Monday	CGS, Saturday Only, graduate, and evening classes meet remotely during this period;final exams held last scheduled class	12/5/2020	Saturday	Pittsburgh Campus
11/30/2020	Monday	Final examination period for undergraduate day classes, Remote Finals only	12/3/2020	Thursday	Pittsburgh Campus
12/2/2020	Wednesday	Faculty Assembly	12/2/2020	Wednesday	Pittsburgh Campus
12/4/2020	Friday	Spring Term deadline for continuing students to register	12/4/2020	Friday	Pittsburgh Campus
12/5/2020	Saturday	Last Day of the Undergraduate Fall Term	12/5/2020	Saturday	All Campuses
12/6/2020	Sunday	Winter Recess for students (no classes), all schools	1/18/2021	Monday	All Campuses
12/6/2020	Sunday	Residence halls close	12/6/2020	Sunday	Pittsburgh Campus
12/8/2020	Tuesday	Fall Term grades must be approved by instructors by 11:59 p.m.	12/8/2020	Tuesday	Pittsburgh Campus
12/10/2020	Thursday	Senate Council	12/10/2020	Thursday	Pittsburgh Campus
12/12/2020	Saturday	Fall Term Ends: Official date for degrees awarded in Fall Term	12/12/2020	Saturday	All Campuses
12/21/2020	Monday	Winter Recess for faculty, staff, & designated offices. Responsibility centers & research projects staffed as necessary*	1/3/2021	Sunday	All Campuses

January 2021

Begins			Ends		Campus
12/6/2020	Sunday	Winter Recess for students (no classes), all schools	1/18/2021	Monday	All Campuses
12/21/2020	Monday	Winter Recess for faculty, staff, & designated offices. Responsibility centers & research projects staffed as necessary*	1/3/2021	Sunday	All Campuses
1/4/2021	Monday	All University offices and buildings reopen	1/4/2021	Monday	All Campuses
1/13/2021	Wednesday	Faculty Assembly	1/13/2021	Wednesday	Pittsburgh Campus
1/14/2021	Thursday	Residence halls open (subject to change – pending official review – further communication to follow)	1/14/2021	Thursday	Pittsburgh Campus
1/18/2021	Monday	Dr. Martin Luther King's birthday observance (University closed)	1/18/2021	Monday	All Campuses
1/19/2021	Tuesday	Spring Term enrollment period ends for all students	1/19/2021	Tuesday	All Campuses
1/19/2021	Tuesday	Spring Term classes begin	1/19/2021	Tuesday	All Campuses
1/21/2021	Thursday	Senate Council	1/21/2021	Thursday	Pittsburgh Campus

February 2021

Begins			Ends		Campus
2/5/2021	Friday	Spring Term add/drop period ends at 11:59pm ET	2/5/2021	Friday	All Campuses
2/10/2021	Wednesday	Faculty Assembly	2/10/2021	Wednesday	Pittsburgh Campus
2/12/2021	Friday	Summer Term open enrollment begins (Veteran Students)	2/12/2021	Friday	All Campuses
2/15/2021	Monday	Summer Term open enrollment begins (Non-Veteran Students)	2/15/2021	Monday	All Campuses
2/17/2021	Wednesday	Senate Council	2/17/2021	Wednesday	Pittsburgh Campus
2/23/2021	Tuesday	Student self-care day (no classes; may not be observed by all graduate programs)	2/23/2021	Tuesday	All Campuses
2/26/2021	Friday	Faculty Honors Convocation	2/26/2021	Friday	All Campuses

March 2021

Begins			Ends		Campus
3/17/2021	Wednesday	Faculty Assembly	3/17/2021	Wednesday	Pittsburgh Campus
3/19/2021	Friday	Fall Term enrollment appointments begin (Veteran Students)	3/19/2021	Friday	All Campuses
3/19/2021	Friday	Final Exam Conflict Form submission deadline	3/19/2021	Friday	All Campuses **(Guidelines)**
3/22/2021	Monday	Fall Term enrollment appointments begin (Non-Veteran Students)	3/22/2021	Monday	All Campuses
3/24/2021	Wednesday	Student self-care day (no classes; may not be observed by all graduate programs)	3/24/2021	Wednesday	All Campuses
3/25/2021	Thursday	Senate Council	3/25/2021	Thursday	Pittsburgh Campus
3/26/2021	Friday	Spring Term deadline for students to submit Monitored Withdrawal forms to Dean's Office	3/26/2021	Friday	All Campuses

April 2021

Begins			Ends		Campus
4/2/2021	Friday	Last day for Fall Term enrollment appointments	4/2/2021	Friday	All Campuses
4/3/2021	Saturday	Fall Term open enrollment period begins	4/3/2021	Saturday	All Campuses
4/6/2021	Tuesday	Graduate and Post Doctoral Honors Convocation	4/6/2021	Tuesday	Pittsburgh Campus
4/14/2021	Wednesday	Faculty Assembly	4/14/2021	Wednesday	Pittsburgh Campus
4/22/2021	Thursday	Senate Council	4/22/2021	Thursday	Pittsburgh Campus
4/23/2021	Friday	Spring Term: Last day for undergraduate day classes	4/23/2021	Friday	All Campuses
4/24/2021	Saturday	Reading Day	4/24/2021	Saturday	All Campuses
4/24/2021	Saturday	CGS, Saturday Only, graduate, and evening classes meet during this period; final exams held during last scheduled class	5/1/2021	Saturday	Pittsburgh Campus
4/26/2021	Monday	Final examination period for undergraduate day classes	5/1/2021	Saturday	Pittsburgh

					Campus

May 2021

Begins			Ends		Campus
4/24/2021	Saturday	CGS, Saturday Only, graduate, and evening classes meet during this period; final exams held during last scheduled class	5/1/2021	Saturday	Pittsburgh Campus
4/26/2021	Monday	Final examination period for undergraduate day classes	5/1/2021	Saturday	Pittsburgh Campus
5/1/2021	Saturday	Spring Term Ends: Official date for degrees awarded in Spring Term	5/1/2021	Saturday	All Campuses
5/1/2021	Saturday	Senior Honors Convocation	5/1/2021	Saturday	Pittsburgh Campus
5/2/2021	Sunday	Annual Undergraduate Commencement Convocation	5/2/2021	Sunday	Pittsburgh Campus
5/2/2021	Sunday	Residence halls close (except for graduating seniors)	5/2/2021	Sunday	Pittsburgh Campus
5/5/2021	Wednesday	Spring Term grades must be approved by instructors by 11:59 p.m.	5/5/2021	Wednesday	Pittsburgh Campus
5/7/2021	Friday	Staff holiday	5/7/2021	Friday	All Campuses
5/9/2021	Sunday	Summer Term resident halls open	5/9/2021	Sunday	Pittsburgh Campus
5/10/2021	Monday	Summer Term enrollment period ends and classes begin	5/10/2021	Monday	All Campuses
5/12/2021	Wednesday	Faculty Assembly	5/12/2021	Wednesday	Pittsburgh Campus
5/17/2021	Monday	Summer 12-WEEK, 6-WEEK-1, 4-WEEK-1 sessions enrollment period ends and classes begin	5/17/2021	Monday	All Campuses
5/19/2021	Wednesday	Summer 4-WEEK-1 and 6-WEEK-1 sessions add/drop period ends	5/19/2021	Wednesday	All Campuses
5/20/2021	Thursday	Senate Council	5/20/2021	Thursday	Pittsburgh Campus
5/21/2021	Friday	Summer Term add/drop period ends	5/21/2021	Friday	All Campuses
5/24/2021	Monday	Summer 12-WEEK session add/drop period ends	5/24/2021	Monday	

					All Campuses
5/29/2021	Saturday	Official date for degrees awarded in the School of Law and School of Dental Medicine	5/29/2021	Saturday	Pittsburgh Campus
5/31/2021	Monday	Memorial Day (University closed)	5/31/2021	Monday	All Campuses

June 2021

Begins			Ends		Campus
6/2/2021	Wednesday	Summer 4-WEEK-1 session deadline for students to submit Monitored Withdrawal forms to Dean's Office	6/2/2021	Wednesday	All Campuses
6/4/2021	Friday	Summer 6-WEEK-1 session deadline for students to submit Monitored Withdrawal forms to Dean's Office	6/4/2021	Friday	All Campuses
6/9/2021	Wednesday	Faculty Assembly	6/9/2021	Wednesday	Pittsburgh Campus
6/12/2021	Saturday	Summer 4-WEEK-1 session ends: Final examinations scheduled during last class meeting	6/12/2021	Saturday	All Campuses
6/14/2021	Monday	Summer 4-WEEK-2 session enrollment period ends and classes begin	6/14/2021	Monday	All Campuses
6/16/2021	Wednesday	Summer 4-WEEK-2 session add/drop period ends	6/16/2021	Wednesday	All Campuses
6/17/2021	Thursday	Senate Council	6/17/2021	Thursday	Pittsburgh Campus
6/26/2021	Saturday	Official date for awarding of degrees	6/26/2021	Saturday	All Campuses
6/26/2021	Saturday	Summer 6-WEEK-1 session ends: Final examinations scheduled during last class meeting	6/26/2021	Saturday	All Campuses
6/28/2021	Monday	Summer 6-WEEK-2 session enrollment period ends and classes begin	6/28/2021	Monday	All Campuses
6/30/2021	Wednesday	Summer 4-WEEK-2 session deadline for students to submit Monitored Withdrawal forms to Dean's Office	6/30/2021	Wednesday	All Campuses
6/30/2021	Wednesday	Summer 6-WEEK-2 session add/drop period ends	6/30/2021	Wednesday	All Campuses
6/30/2021	Wednesday	Summer 6-WEEK-1 session grades must be approved by instructors by 11:59 p.m.	6/30/2021	Wednesday	Pittsburgh Campus

July 2021

Begins			Ends		Campus
7/4/2021	Sunday	Independence Day (University closed)	7/5/2021	Monday	All Campuses

7/9/2021	Friday	Summer Term and 12-WEEK session deadline for students to submit Monitored Withdrawal forms to Dean's Office	7/9/2021	Friday	All Campuses
7/10/2021	Saturday	Summer 4-WEEK-2 session ends: Final examinations scheduled during last class meeting	7/10/2021	Saturday	All Campuses
7/12/2021	Monday	Summer 4-WEEK-3 session enrollment period ends and classes begin	7/12/2021	Monday	All Campuses
7/14/2021	Wednesday	Summer 4-WEEK-2 session grades must be approved by instructors by 11:59 p.m.	7/14/2021	Wednesday	Pittsburgh Campus
7/14/2021	Wednesday	Summer 4-WEEK-3 session add/drop period ends	7/14/2021	Wednesday	All Campuses
7/14/2021	Wednesday	Fall Term deadline for continuing students to register	7/14/2021	Wednesday	Pittsburgh Campus
7/23/2021	Friday	Summer 6-WEEK-2 session deadline for students to submit Monitored Withdrawal forms to Dean's Office	7/23/2021	Friday	All Campuses
7/28/2021	Wednesday	Summer 4-WEEK-3 session deadline for students to submit Monitored Withdrawal forms to Dean's Office	7/28/2021	Wednesday	All Campuses

August 2021

Begins			Ends		Campus
8/7/2021	Saturday	Summer 12-WEEK, 6-WEEK-2, 4-WEEK-3 sessions end: Final examinations scheduled during last class meeting	8/7/2021	Saturday	All Campuses
8/11/2021	Wednesday	Summer 12-WEEK, 6-WEEK-2, 4-WEEK-3 sessions grades must be approved by instructors by 11:59 p.m.	8/11/2021	Wednesday	Pittsburgh Campus
8/14/2021	Saturday	Official date for awarding degrees	8/14/2021	Saturday	All Campuses
8/14/2021	Saturday	Summer Term Ends: Final examinations scheduled during last class meeting	8/14/2021	Saturday	All Campuses
8/15/2021	Sunday	Residence halls close	8/15/2021	Sunday	Pittsburgh Campus
8/18/2021	Wednesday	Summer Term grades must be approved by instructors by 11:59 p.m.	8/18/2021	Wednesday	Pittsburgh Campus

September 2021

Begins			Ends		Campus
9/1/2021	Wednesday	Faculty Assembly	9/1/2021	Wednesday	Pittsburgh Campus
9/9/2021	Thursday	Senate Council	9/9/2021	Thursday	Pittsburgh Campus

October 2021

Begins			Ends		Campus
10/6/2021	Wednesday	Faculty Assembly	10/6/2021	Wednesday	Pittsburgh Campus
10/14/2021	Thursday	Senate Council	10/14/2021	Thursday	Pittsburgh Campus

November 2021

Begins			Ends		Campus
11/3/2021	Wednesday	Faculty Assembly	11/3/2021	Wednesday	Pittsburgh Campus
11/11/2021	Thursday	Senate Council	11/11/2021	Thursday	Pittsburgh Campus

December 2021

Begins			Ends		Campus
12/1/2021	Wednesday	Faculty Assembly	12/1/2021	Wednesday	Pittsburgh Campus
12/9/2021	Thursday	Senate Council	12/9/2021	Thursday	Pittsburgh Campus

Events calendar powered by 25Live

Printed: Monday, November 2, 2020 at 6:27 AM PST

Calendar events displayed in Eastern Daylight Time/Eastern Standard Time

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Search Programs, Courses & Policies

Whether you are interested in attending the University of Pittsburgh, or are already enrolled, you can search the Catalog to obtain campus information, academic programs, policies, and courses. For any questions, Contact us!

University of Pittsburgh Nondiscrimination Policy Statement

The University of Pittsburgh, as an educational institution and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, as fully explained in Policy 07-01-03, the University prohibits and will not engage in discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, gender identity and expression, genetic information, disability, or status as a veteran. The University also prohibits and will not engage in retaliation against any person who makes a claim of discrimination or harassment or who provides information in such an investigation. Further, the University will continue to take affirmative steps to support and advance these values consistent with the University's mission. This policy applies to admissions, employment, access to and treatment in University programs and activities. This is a commitment made by the University and is in accordance with federal, state, and/or local laws and regulations.

For information on University equal opportunity and affirmative action programs, please contact: University of Pittsburgh, Office of Diversity and Inclusion, Cheryl Ruffin, Institutional Equity Manager, 4415 Fifth Avenue, 2nd Floor Webster Hall, Pittsburgh, PA 15260 (412) 648-7860.

For complete details on the University's Nondiscrimination Policy, please refer to Policy 07-01-03. For information on how to file a complaint under this policy, please refer to Procedure 07-01-03.

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Catalog Help

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About the University of Pittsburgh

The University of Pittsburgh is an internationally respected center of learning and research, offering exceptional educational opportunities in the arts, sciences, and professions.

Mission

The University of Pittsburgh, founded in 1787, is one of the oldest institutions of higher education in the United States. As one of the nation's distinguished comprehensive universities, the resources of the University constitute an invaluable asset for the intellectual, economic, and social enrichment of Pennsylvania, while the international prestige of the University enhances the image of Pennsylvania throughout the world.

The University's mission is to:

• Provide high-quality undergraduate programs in the arts and sciences and professional fields, with emphasis upon those of special benefit to the citizens of Pennsylvania;

• Offer superior graduate programs in the arts and sciences and the professions that respond to the needs of Pennsylvania, as well as to the broader needs of the nation and the world;

• Engage in research, artistic, and scholarly activities that advance learning through the extension of the frontiers of knowledge and creative endeavor;

• Cooperate with industrial and governmental institutions to transfer knowledge in science, technology, and health care;

• Offer continuing education programs adapted to the personal enrichment, professional upgrading, and career advancement interests and needs of adult Pennsylvanians; and

• Make available to local communities and public agencies the expertise of the University in ways that are consistent with the primary teaching and research functions and contribute to social, intellectual, and economic development in the Commonwealth, the nation, and the world.

The trustees, faculty, staff, students, and administration of the University are dedicated to accomplishing this mission, to which they pledge their individual and collective efforts, determined that the University shall continue to be counted among the prominent institutions of higher education throughout the world.

History

The University began in the Pennsylvania wilderness as the Pittsburgh Academy in 1787, the year the U.S. Constitution was adopted. Thirty-two years later, the Pittsburgh Academy became the Western University of Pittsburgh, and in 1908, the school changed its name to the University of Pittsburgh. Graduate degrees have been conferred since 1836, and the first doctoral program was developed in 1884. A private institution for most of its past, the University of Pittsburgh became state-related in 1966, establishing a relationship with the Commonwealth of Pennsylvania that continues to benefit both partners. Today, as an elected member of the prestigious Association of American Universities, the University of Pittsburgh claims its place among the top public research universities in the nation.

Accreditation

The University of Pittsburgh is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104, (267) 284 - 5000. In addition, programs may be accredited by discipline-specific accrediting bodies. See Schools, Departments, and Programs section of this catalog for this information.

Academic Organization and Pittsburgh Campus Overview

As a state-related, coeducational institution, the University of Pittsburgh's Pittsburgh campus offers a multitude of degree-granting and other programs housed in 16 undergraduate, graduate, and professional schools. The University system includes the Pittsburgh campus and four regional campuses at Bradford, Greensburg, Johnstown, and Titusville.

There are more than 100 academic, research, and administrative buildings and residence halls located on the Pittsburgh campus, which covers 132 acres in the culturally rich Oakland neighborhood. At the heart of the campus stands a central landmark-the Cathedral of Learning, a 42-story Gothic

tower, which is the tallest school building in the Western Hemisphere. The Cathedral contains the Nationality Rooms, 27 classrooms, each designed to reflect a distinct culture and providing an overall, multidimensional understanding of America's heritage.

At the Pittsburgh campus, over 4,900 faculty serve over 28,500 students, including 9,500 graduate and more than 19,000 undergraduate students. Alumni accomplishments range from managing Fortune 500 corporations, to writing best-selling novels, to unlocking the secrets of DNA ... and more.

Web Address

For more information on the University of Pittsburgh, see the University's Web site at www.pitt.edu.

Administrative Officers, Schools, and Campuses

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University of Pittsburgh Board of Trustees

The Board of Trustees is responsible for advancing the purposes of the University; promoting and protecting its independence, academic freedom, and integrity; and enhancing and preserving its assets for the benefit of future students and society at large. In addition, because the University of Pittsburgh is a state-related institution, the trustees ensure that Pitt meets its obligations both to the Commonwealth of Pennsylvania and to society generally.

General administrative, academic, and management authority is delegated to the chancellor. However, the board retains ultimate responsibility for all University affairs.

There are three or more regular meetings of the Board of Trustees each year, including an annual meeting. Special meetings also may be called. Much of the board's work is carried out by committees; many of these committees include faculty, staff, and students as non-voting representatives.

Thomas E. Richards, *Chairperson*

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Source: Office of the Secretary, June 30, 2020

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Deans - Pittsburgh Campus

Arjang Assad, PhD, Dean, Joseph M. Katz Graduate School of Business and College of Business Administration

Kathleen Blee, PhD, Dean, Kenneth P. Dietrich School of Arts and Sciences and the College of General Studies

Bruce Childers, PhD, Interim Dean, School of Computing and Information

Bernard Costello, DMD, PhD, Dean, School of Dental Medicine

Anthony Delitto, PhD, Dean, School of Health and Rehabilitation Sciences

Jacqueline Dunbar-Jacob, PhD, Dean, School of Nursing

Elizabeth Farmer, PhD, Dean, School of Social Work

A. Everette James, III, JD, MBA, Interim Dean, Graduate School of Public Health

John T. S. Keeler*, PhD, Dean, Graduate School of Public and International Affairs (until 9/30/2020)

Valerie Kinloch, PhD, Dean, School of Education

Patricia D. Kroboth, PhD, Dean, School of Pharmacy

James Martin, PhD, Dean, John A. Swanson School of Engineering

Audrey Murrell, PhD, Acting Dean, University Honors College

Anantha Shekhar, MD, PhD, Dean, School of Medicine

Carissa Schively Slotterback*, PhD, Dean, Graduate School of Public and International Affairs (effective 10/1/2020)

Amy Wildermuth, JD, Dean, School of Law

*** Dean of the Graduate School of Public and International Affairs will change effective, October 1, 2020.**

Presidents - Regional Campuses

Robert Gregerson, PhD, President, University of Pittsburgh at Greensburg

Catherine Koverola, PhD, President, University of Pittsburgh at Bradford and University of Pittsburgh at Titusville

Jem Spectar, PhD, President, University of Pittsburgh at Johnstown

Schools

College of Business Administration

College of General Studies

Graduate School of Public and International Affairs

Graduate School of Public Health

John A. Swanson School of Engineering

Joseph M. Katz Graduate School of Business

Kenneth P. Dietrich School of Arts and Sciences

School of Computing and Information

School of Dental Medicine

School of Education

School of Health and Rehabilitation Sciences

School of Law

School of Medicine

School of Nursing

School of Pharmacy

School of Social Work

University Honors College

Regional Campuses

University of Pittsburgh at Bradford

University of Pittsburgh at Greensburg

University of Pittsburgh at Johnstown

University of Pittsburgh at Titusville

Off-campus Locations and Other Instructional Sites

Additional Location **Allegheny Intermediate Unit** 475 East Waterfront Drive Homestead, PA 15120 Opened: 08/03/2010	Other Instructional Site **Bellefield Professional Building** 130 North Bellefield Avenue Pittsburgh, PA 15213
Additional Location **Beaver Valley Intermediate Unit** 147 Popular Drive Monaca, PA 15061	Other Instructional Site **Bridgeside Point I** 100 Technology Drive, Suite 210 Pittsburgh, PA 15219
Additional Location **Butler County Community College**	Other Instructional Site **Bridgestone Point II**

107 College Drive Butler, PA 16002 Opened: 08/03/2010	450 Technology Drive Pittsburgh, PA 15219
Additional Location **Dick's Sporting Good** 345 Court Street Pittsburgh, PA 15108 Opened: 10/30/2017	Other Instructional Site **Butler County Community College** 107 College Dr. Butler, PA 16002
Additional Location **EMBA Worldwide Sao Paulo, Brazil** Avenida das Nações Unidas 12.551 4° andar - salas 1 e 2 Sao Paulo, 04578-903 Brazil Opened: 11/01/2016	Other Instructional Site **Center for Strategic and International Studies** 1616 Rhode Island Avenue Washington, DC 20036
Additional Location **Intermediate Unit I (Sch. of Educ.)** Data not provided Coal Center, PA 00000	Other Instructional Site **Eye & Ear Institute** 203 Lothrop Street Pittsburgh, PA 15213
Additional Location **St. Mary's (Univ of Pgh - Bradford)** Data not provided St. Mary's, PA 00000	Other Instructional Site **K-Z Guest Ranch** P.O. Box 2167 Cody, WY 82414
Additional Location **U-P at Bradford (c/o Sch of Soc Wk)** Data not provided Bradford, PA 00000	Other Instructional Site **Kaufmann Building** 3471 Fifth Ave. Pittsburgh, PA 15213
Additional Location **U-P at Johnstown, (c/o Sch of Soc Wk)** Data not provided Johnstown, PA 00000	Other Instructional Site **Longhorn Lodge** 362 N. 4th Street River Rock, WY 82083
Additional Location **U-P at Titusville, c/o U-P at Bradford** 504 E. Main Street Titusville, PA 16354	Other Instructional Site **Magee Women's Research Institute** 204 Craft Ave. Pittsburgh, PA 15213
Additional Location **University of Pittsburgh at Bradford** Data not provided 300 Campus Drive Bradford, PA 00000 OPEID: 00337903	Other Instructional Site **McKee Place** 230 McKee Place Suite 500 Pittsburgh, PA 15213
Additional Location **University of Pittsburgh at Greensburg** 1150 Mt. Pleasant Rd Greensburg, PA 00000 OPEID: 00337904	Other Instructional Site **Neuromuscular Research Laboratory** 3860 Water Street Pittsburgh, PA 15203
Additional Location **University of Pittsburgh at Johnstown** Data not provided 450 Schoolhouse Road Johnstown, PA 00000 OPEID: 00337902	Other Instructional Site **Parkvale Building** 200 Meyran Avenue Pittsburgh, PA 15213
Additional Location **University of Pittsburgh at Titusville** Data not provided 504 E. Main St.	Other Instructional Site **Pymatuning Laboratory of Ecology**

Titusville, PA 00000 OPEID: 00337901	13142 Hartstown Road Linesville, PA 16424
Other Instructional Site **Bakery Square** 6425 Penn Avenue 4th. Floor Pittsburgh, PA 15206	Other Instructional Site **Regional Learning Alliance Conference Center** 850 Cranberry Woods Drive Cranberry, PA 16066
Other Instructional Site **University of Pittsburgh Applied Research Center (UPARC)** 3010 William Pitt Way Building A-7, Rm. 216 Pittsburgh, PA 15238	Other Instructional Site **University of Pittsburgh-Washington DC Office** 2025 M Street, NW Washington, DC 20036

Academic Regulations

Advising

Academic advising is a key part of every undergraduate's experience at the University of Pittsburgh. An academic advisor helps a student determine the appropriate academic path to further the student's educational and career goals. To be a success, the advising process must work both ways: The advisor will be there to help when the student needs it, and the student must actively seek out an advisor for help. Before signing up for classes each term, students meet with their advisors. Though each school may have different advising requirements, students are generally required to meet with their advisors at least two times per term-for an advising appointment and a subsequent registration appointment. Consult with the individual school for school-specific advising services.

Allowable Credits (Credit and Course Limitations)

There are certain limitations on credits, other than those earned as part of regular undergraduate courses taken at the University, that may be applied toward a degree. Those limitations are detailed below.

Advanced Standing Credits

Each school determines whether and under what circumstances the advanced standing credits listed below will be awarded toward a University of Pittsburgh degree or certificate offered by the school. Contact the individual schools for details.

Transfer Credit

The University will grant credit earned at other institutions based on course equivalencies, including expected learning outcomes, with those of the University curriculum and standards, subject to University policy and individual school requirements. The University will not refuse to consider a transfer credit based on the accreditation of the sending institution. Transfer credit is subject to University policy and individual school requirements.

Advanced Placement

Credits may be earned toward a University of Pittsburgh degree or certificate through standardized examinations such as the College-Level Examination Program (CLEP), Occupational Competency, Excelsior College Examination Program, and Advanced Placement (AP) Exams. In addition, some schools give credit for the International Baccalaureate Higher-Level Examinations. Students should contact their school to determine how credit may be granted based on completion of these examinations.

Credit by Examination

In some cases, students may earn credits toward a University of Pittsburgh degree or certificate by passing a course examination without registering for the course. Contact the individual department or school for information, as each sets its own policies as to the specific courses for which students may request credit by examination.Career Development Courses

Career Development Courses

Noncredit, career development courses are not applicable to the bachelor's degree but may be included among the requirements for certain professional certificates.

Cooperative Programs

The University has established some arrangements with industries that permit students to rotate four-month terms between the workplace and the classroom. These are paid positions related to the student's field of study. These programs are administered by the Swanson School of Engineering and are available to any student with a science-related major. The experience normally starts in the sophomore or junior year. Students should contact

their school or department to determine the maximum number of credits that may be earned toward their degree requirements through cooperative programs. Call 412-624-9826 for more information.

Duplication of Course Content

Students may not earn credit for courses that substantially duplicate the content of other courses for which they have already received credit.

Directed Reading and Research, Independent Study, Internships

Some schools offer individually designed study other than regular courses. Students are limited by the individual schools as to how many such independent study, directed reading, directed research, and internship credits can be counted among the required credits for the degree. Requirements and procedures may also differ. Contact school for details.

Directed Reading

The student undertakes a specified course of study comparable to a regular course under the direct supervision of a faculty member.

Directed Research

The student pursues a defined research project on campus under the guidance of a faculty member.

Independent Study

Independent study involves an independent program of study, research, or creative activity designed under specified conditions and is usually conducted off campus with less immediate direction by the sponsoring faculty member.

Internships

Some schools provide internship experiences appropriate to the student's academic discipline. An internship is a supervised, work-related experience, either volunteer or compensated. It is intended to be a new experience, not an existing position in which the student is already working. Students will only get internship credit for a current employment situation that has been pre-approved as an internship by the relevant school or department.

English Language Institute Courses

Credit for certain English Language Institute courses may be applied toward the undergraduate degree. See school for details.

Enrollment in Graduate Courses

University of Pittsburgh undergraduate students with sufficient preparation are permitted to enroll in certain graduate courses at the University following procedures determined by each school. The graduate credits earned may be counted toward the undergraduate degree if approved by the student's school. These may not be counted as credits toward a graduate degree except as noted below.

Undergraduate students who need fewer than 15 credits to complete requirements for the baccalaureate degree and who intend to continue study toward an advanced degree may be permitted during their final term to register for graduate courses that will later apply toward a graduate degree. The student must obtain written permission from the school of proposed graduate study that the courses may count when and if the student is admitted into the graduate degree program. This privilege should not be granted if the proposed total program exceeds a normal full-time load. Although these credits will appear on the undergraduate transcript, they will not count toward fulfilling undergraduate degree requirements. They will be posted as advanced standing credits on the graduate transcript.

Reserve Officer Training Corps (ROTC) Credits

Students may elect to participate in either the Air Force ROTC or Army ROTC Programs at the University of Pittsburgh or the Navy ROTC Program at Carnegie Mellon University. Contact individual schools to determine which credits earned in ROTC courses may be applied toward a degree. (For more information on ROTC, see the Special Academic Opportunities section of this catalog.)

Registration

For additional registration information, visit the University registrar's Web site at www.registrar.pitt.edu

Full-Time and Part-Time Study

Full-time study is defined as enrollment for 12 to 18 credits per term, and part-time study is defined as enrollment for one to 11 credits per term. Students are charged a flat tuition rate for full-time study in the fall and spring terms. For part-time students, tuition payment is on a per-credit basis. Students may exceed the 18-credit limit with written permission from the dean of their school, but they will be billed on a per-credit basis for each additional credit. University fees and other applicable charges are assessed on student statements. Some schools within the University may also apply academic limitations on the number of credits for which a student is permitted to enroll each term. For instance, students in Arts and Sciences must get permission to enroll for more than 18 credits. During the summer term and summer sessions, most students are billed on a per-credit basis regardless of the number of credits taken.

Registering for Classes

After students are admitted to a school they will be assigned an academic advisor. All Undergraduate students must meet with their academic advisor each term prior to enrolling in classes. Most students have the ability to use the self- service enrollment tools available through the Student Portal or Pitt PS Mobile.

Continuing students with the ability to utilize self-service enrollment will be assigned an enrollment appointment during the first two weeks of the enrollment period. Students in programs that do not permit self-service enrollment should contact their academic advisor regarding the enrollment process for their program. The enrollment period for a term or session is published in the University's *Academic Calendar*.

Once students have enrolled they may view their class schedules online via the Student Portal or Pitt PS Mobile.

Adding and Dropping Courses

Students may add or drop courses from the start of their enrollment appointment until the end of the add/drop period. The dates for the add/drop periods are published in the University's *Academic Calendar*. Students are encouraged to consult their academic advisors regarding the impact of course changes on their academic career. Students who no longer wish to remain enrolled in a course after the add/drop period has ended may withdraw from the course or resign from the University. See Monitored Withdrawal from a Course and Resigning from the University.

Extended Drop Period

Under special circumstances, undergraduate students may be eligible to drop a course in the third week of the fall or spring semester, effective with the Spring 2018 semester. Students must meet all of the following criteria to drop a course during the extended drop period:

- Undergraduate students at all campuses
- Undergraduate courses
- Fall and spring semesters
- Students must remain in full-time status after dropping the course(s).
- The student's advisor must provide permission to drop.

Students must review the proposed drop with their academic advisor. If the student's advisor finds that the student is eligible, the advisor will process the drop(s). If the student's advisor cannot process the drop for any reason, then the advisor will request that the Registrar's Office at the student's campus process it.

Cross-Registration

Cross-registration provides students with the opportunity to enroll in courses at member institutions of the Pittsburgh Council on Higher Education (PCHE). The designated colleges and universities at which undergraduate students may cross-register include Carlow University, Carnegie Mellon University, Chatham University, Community College of Allegheny County, Duquesne University, La Roche College, Pittsburgh Theological

Seminary, Point Park University, and Robert Morris University. Only full-time students may cross-register. Please note that students must maintain a full-time course load (at least 12 credits as an undergraduate) at Pitt while cross-registered. Students who cross-register do not pay tuition to the host institution; however, they are responsible for any additional fees associated with the course such as laboratory fees, books, and the like. Students normally may register for only one course off campus in a given term. The grades and credits earned at the host institution are transferred to the home school. The academic policies of the host institution prevail.

Cross-registration is only available in the fall and spring terms. During the summer, students may attend one of the above colleges as guest students, but they must pay that institution's tuition and fees. Students are discouraged from cross-registering during their term of graduation to avoid any delays in the receipt of course credit needed to graduate. Students should meet with their advisors or a school representative before they cross-register. For more information on cross-registration, visit www.pchepa.org.

Monitored Withdrawal from a Course

After the add/drop period has ended, students may withdraw from a course that they no longer wish to attend by completing a Monitored Withdrawal Request form in the office of the school offering the course. Students must process the Monitored Withdrawal Request form within the first nine weeks of the term in the fall and spring. Because summer sessions vary in length, students should check the University's *Academic Calendar* for those deadlines. Students should check with the school offering the course for the last day to submit a Monitored Withdrawal Request form. The grade W will appear on the student's grade report and transcript. There is no financial adjustment to students' tuition or fee obligations involved in withdrawing from courses, but withdrawing may jeopardize satisfactory academic progress, financial aid, and athletic eligibility.

Resigning from the University/Termination of Registration

If students decide to drop all of their courses after the add/drop period has ended and before 60 percent of the term or session has been completed, they must resign from the University for that term. Official resignation from the University requires students to contact the Student Appeals Office. Students have several options. They may resign in person, by mail, or by calling 412-624-7585, where students may leave a message 24 hours a day, including weekends and holidays. An R grade will appear on the student's academic transcript for each course in the term of resignation. Tuition is prorated from the date of the student's notification to the Student Appeals Office of the student's desire to resign, unless 60 percent of the term has been completed, in which case there is no refund.

After the 60 percent point in time of the term or session has passed, students who wish to terminate their registration may process withdrawal from all classes only with the permission of the academic dean. If the reason for withdrawal is medical or psychological in nature, the academic dean may consult with the director of Student Health Service prior to making a determination. There is no financial adjustment associated with this procedure, which results in the assignment of W grades for the courses.

Grading and Records

For additional grading and records information, visit the University Registrar's Web site at www.registrar.pitt.edu.

GPA

The Grade Point Average (GPA) is the numeric indication of a student's academic achievement based on a 4.00 grade point scale. Undergraduates must have a 2.00 GPA in order to graduate from the University of Pittsburgh. The value is the average of total letter grades earned and is available by term or career. Some academic centers may also maintain degree and/or major/departmental GPA values.

Grading System

The University of Pittsburgh has a standard letter grade system (see Letter Grade Option). Some additional grading options are available in some courses as determined by the school and the instructor (see Grading Options below). Finally, undergraduate students may choose to audit a course. Students must complete Grade Option/Audit Request forms to request a grading option available in a particular course.

Grading Options

Individual schools may elect to offer a course with the following grade options:

LG	Letter grade

H/S/U	Honors/Satisfactory/Unsatisfactory
S/NC	Satisfactory/No-Credit (Formerly the S/N Option)
LG and H/S/U	Letter grade and Honors/Satisfactory/Unsatisfactory
LG and S/NC	Letter grade and Satisfactory/No-Credit

Students may select a grade option for those courses that offer more than one option at the point of enrollment or by submitting a Grade Option/Audit Request form by the established deadline to the school offering the course (generally four weeks from the start of the term, but check with the school for specific deadlines). If the student does not select a grade option for a course when more than one grade option is available, the default option (generally the letter grade option) will automatically apply.

Letter Grade Option

The University's letter grade system identified below will be followed without exception:

Grade	Quality Points
A+	= 4.00
A	= 4.00 Superior
A-	= 3.75
B+	= 3.25
B	= 3.00 Meritorious
B-	= 2.75
C+	= 2.25
C	= 2.00 Adequate
C-	= 1.75
D+	= 1.25
D	= 1.00 Minimal
D-	= 0.75
F	= 0.00 Failure

H/S/U Grade Option

Certain courses are offered on the H/S/U (Honors/Satisfactory/Unsatisfactory) grade option. Under this option, students earn an H if they do exceptional work (equivalent to an A- or higher under the letter grade system), an S if they do satisfactory work (equivalent to grades from a C up to a B+), or a U if they do unsatisfactory work (equivalent to a C- or lower). The H and S grades received under this option are counted toward graduation but are not computed in the student's GPA. The U grade is counted toward neither graduation nor the GPA.

S/NC Grade Option (Formerly the S/N Option)

Certain courses are offered on the S/NC (Satisfactory/No-Credit) grade option. This option was designed to encourage students to explore new and potentially difficult subjects without fear of the risks of failure. Under this option, a student who does satisfactory work (a grade of C or better) in a course receives the grade of S. If the student's work is not satisfactory (a grade of C- or lower), the grade of NC (No Credit) is given. Courses for

which an S is received are counted toward graduation, but are not computed in the GPA. Courses in which an NC is received are counted toward neither graduation nor the GPA.

Other Grades: Unfinished, Resign, Withdraw

Upon a student's completion of a course, one of the grades listed below may appear on the student's transcript in lieu of one of the options selected by the student and/or instructor (the options are listed under Grading Options). None of these grades carries quality points:

G Grade

The G grade signifies unfinished course work due to extenuating personal circumstances. Students assigned G grades are required to complete course requirements no later than one year after the term or session in which the course was taken. Some schools have a shorter deadline for completion of G grades; see school for details.

The "NG" grade will remain on the record and the student will be required to re-register for the course if it is needed to fulfill requirements for graduation.

R Grade

The R grade signifies that a student resigned from the University for the term. (See Resigning from the University for more information.)

W Grade

The W grade signifies that a student has withdrawn from a course. (See Monitored Withdrawal from a Course for more information.)

Auditing a Course

With the consent of the school and instructor, students may choose to audit a course. To audit a course, a student must register and pay tuition for the course. The audit grade (N) is not counted toward graduation or the GPA.

Repeating Courses

A student may repeat any course, except as noted below. No sequence course may be repeated for credit after a higher numbered course in that sequence has been passed with a C or higher grade. This also pertains to graduate and first professional students who have passed with a B or higher grade. No course may be repeated at any other institution and have that grade accepted as a replacement for the original grade earned at the University of Pittsburgh. The grade earned by repeating a course is used in lieu of the grade originally earned.

The following calculations apply to all students at the University of Pittsburgh:

- The original course and grade remain on the transcript and/or the academic record, however, the grade and credits originally earned are not counted in the calculation of the QPA (prior to Fall term 2005) or the GPA.
- The repeated course does not increase the number of credits counted toward meeting the degree requirements unless an F is replaced by a passing grade.

W, R, N, or NC grades reported for the repeated course will not be identified as a course repeat, thus the original grade earned will continue to be counted in the QPA (prior to Fall term 2005) or GPA. Incomplete (G or I) grades will not be identified as repeated courses until the course work is completed. Students may repeat a course no more than two times. Any grade earned in the repeated course will be posted to the academic record even if it is lower than the original grade. The repeated course must be the same in which the original grade was earned. In extenuating circumstances, a department chairman, with the dean's approval, may substitute another course of similar content. Course repeat forms must be submitted to the Office of the Registrar to affect grade replacement.

Grade Changes

The instructor of a course may change a student's grade by submitting a Grade Change Request Form which can be found on the Faculty Portal. All grade changes require the authorization of the dean of the school from which the original grade was issued. Students can verify grade changes for the terms available online via Student Portal at my.pitt.edu or via Pitt PS Mobile.

Viewing Grades

Students can access their grades online via the Student Center at my.pitt.edu or via Pitt PS Mobile. Grade submission deadlines can be found in the University's *Academic Calendar*.

Transcripts

An academic transcript serves as a permanent record of a student's academic progress. The transcript is a cumulative record of the student's GPA, as well as a record of the department, title, and grade for each course in which the student has enrolled and summary advanced standing information. Students may request an official transcript that bears the seal and signature of the University registrar. Upon graduation, the transcript reflects a student's degree and date, major, minor, or certificate, and, if applicable, honors, area of concentration.

Academic Record

The academic record is not an official University transcript, but a document containing a student's complete University of Pittsburgh academic history. In addition to the information provided on the transcript, the academic record may display additional course details, certain academic events and detailed advanced standing/placement/transfer credit information. Students can view a copy of their academic record in the Student Center at my.pitt.edu.

Academic Standing

Undergraduate students' academic standing is maintained and monitored each term by the school in which a student is enrolled. Students who are not on academic probation or academic suspension (i.e., students who maintain a cumulative grade point average of 2.00 or higher) are considered to be in good academic standing.

Dean's List

Students whose grades indicate outstanding academic achievement are recognized on their school's Dean's List. The following schools have a Dean's List:

- Dietrich School of Arts and Sciences
- College of Business Administration
- School of Dental Medicine
- Swanson School of Engineering
- College of General Studies
- School of Health and Rehabilitation Sciences
- School of Information Sciences
- School of Nursing
- School of Pharmacy

Other Academic Honors

Schools and programs may have additional ways of recognizing academic achievement by students, such as Phi Beta Kappa, Tau Beta Pi, or a Term Honor List. More information about these opportunities is available through the school.

Probation, Suspension, and Dismissal

Students who fail to make satisfactory progress may be subject to academic probation and/or suspension and dismissal. Students who have completed at least 12 quality point credits and whose GPA falls below 2.00 will be placed on academic probation by the dean of the school. After a certain period of time on academic probation (determined by the student's school), a student is subject to academic suspension and restricted from registering for classes in that school. Details of the undergraduate school's probation system are available through that school.

Effect on Financial Aid

Conditions for financial aid eligibility usually require students to complete a specified number of credits each year and maintain a specified grade point average (GPA: credits counting toward the degree). Questions about the effect of unsatisfactory academic standing on financial aid should be directed to the Office of Admissions and Financial Aid in Alumni Hall at 412-624-7488.

Graduation

Requirements for Graduation

Graduation requirements differ among schools. However, all undergraduate schools require a minimum of 120 passing credits to graduate, as well as a GPA of at least 2.00. (See specific schools and programs for detailed graduation requirements.) For more policy information please refer to the University of Pittsburgh Policies page.

Application to Graduate

Students must file an application for graduation through their college or school. Generally, students must apply for graduation before the end of the term preceding the one during which they expect to complete all degree requirements. Each school establishes its own deadline by which students must apply for graduation. Students should check with their schools for the deadlines.

Graduation with Honors

Undergraduate members of a graduating class who have attained an outstanding scholastic record may be graduated with University honors. To be eligible, a student must complete at least 60 letter-graded credits at the University of Pittsburgh. All degree-related course work completed at the University is calculated in the grade point average. Receipt of University honors is based on having obtained the following grade point average at graduation:

Summa Cum Laude	3.75
Magna Cum Laude	3.50
Cum Laude	3.25

The honor status achieved by a student will appear on the student's official University transcript and diploma.

Each school may award undergraduate program honors based on the major GPA and other criteria, as determined by the school and department.

Commencement

Candidates for graduation are encouraged to appear in person at commencement, usually held the Sunday after the spring term ends. Although degrees are conferred at commencement for all graduation periods, the official certification for April and May graduates occurs several weeks after the ceremony.

With the exception of students who receive their diplomas at individual school ceremonies, all diplomas are mailed to students approximately four weeks after the official certification date for each graduation period.

Student Rights and Responsibilities

The University has a number of official policies affecting students. For complete and current text on all University policies, please see www.cfo.pitt.edu/policies/.

The information that follows summarizes several key University-wide policies affecting undergraduate students, but students are also responsible for being cognizant of those University, school, and departmental regulations relevant to their programs of study.

Academic Integrity Policy

Students have the responsibility to be honest and to conduct themselves in an ethical manner while pursuing academic studies. Students have the right to be treated by faculty in a fair and conscientious manner in accordance with the ethical standards generally recognized within the academic community (as well as those recognized within the profession). Should a student be accused of a breach of academic integrity or have questions regarding faculty responsibilities, procedural safeguards including provisions of due process have been designed to protect student rights. These may be found in Guidelines on Academic Integrity: Student and Faculty Obligations and Hearing Procedures here.

Computing Use Policy

Every member of the University community has two basic rights regarding computing: privacy and a fair share of resources. It is unethical for another person to violate these rights. All users, in turn, are expected to exercise common sense and decency with regard to the campus computing resources. Please read Acceptable Computing Access and Use, available in campus computing labs or online at technology.pitt.edu/security/acceptable-computing-access-and-use for details.

Students are subject to the rules and regulations as described in the University of Pittsburgh *Student Code of Conduct*. Students should realize that any misuse of computing resources may result in the suspension of their computing privileges.

Student Code of Conduct

The Student Code of Conduct is an outline of the nonacademic rights and responsibilities of University students. The code defines offenses by and against students. A student or University official may file a complaint of violation of the Student Code of Conduct at the University Student Judicial System. For a copy of the code, please contact the judicial system office in 738 William Pitt Union at 412-648-7910 or see www.studentaffairs.pitt.edu/studentconduct.

Judicial System

The Office of Student Conduct of the University Student Judicial System coordinates the Campus Judicial Board. It also receives, previews, and acts upon complaints of violations of the *Student Code of Conduct*. Its purpose is to provide due process and fair treatment in adjudicating charges filed for violations of the code. All complaints about nonacademic student behavior should be filed here.

Pitt Promise: A Commitment to Civility

The University of Pittsburgh is committed to the advancement of learning and service to society. This is best accomplished in an atmosphere of mutual respect and civility, self-restraint, concern for others, and academic integrity. Students are asked to accept the obligation to live by these common values and commit themselves to principles of behavior that contribute to a civil campus environment and to support this behavior in others. The Pitt Promise is online at www.studentaffairs.pitt.edu/pitt-promise/.

Other Policies

Affirmative Action and University of Pittsburgh Nondiscrimination Policy Statement

The University of Pittsburgh, as an educational institution and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, as fully explained in Policy 07-01-03, the University prohibits and will not engage in discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, gender identity and expression, genetic information, disability, or status as a veteran. The University also prohibits and will not engage in retaliation against any person who makes a claim of discrimination or harassment or who provides information in such an investigation. Further, the University will continue to take affirmative steps to support and advance these values consistent with the University's mission. This policy applies to admissions, employment, access to and treatment in University programs and activities. This is a commitment made by the University and is in accordance with federal, state, and/or local laws and regulations.

For information on University equal opportunity and affirmative action programs, please contact: University of Pittsburgh, Office of Diversity and Inclusion, Cheryl Ruffin, Institutional Equity Manager, 4415 Fifth Avenue, 2nd Floor Webster Hall, Pittsburgh, PA 15260 (412) 648-7860.

For complete details on the University's Nondiscrimination Policy, please refer to Policy 07-01-03. For information on how to file a complaint under this policy, please refer to Procedure 07-01-03.

Drug-Free School and Workplace Policy

The University of Pittsburgh prohibits the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance on University property or as part of any University activity. Faculty, staff, and students of the University must also comply with the laws of the Commonwealth of Pennsylvania on the possession and consumption of alcohol.

Violation of this policy will result in disciplinary action within 30 days, including, but not limited to, a warning, written reprimand, suspension, dismissal, expulsion, and/or mandatory participation and successful completion of a drug abuse assistance or rehabilitation program approved by an appropriate health or law-enforcement agency.

Any University employee paid from federally funded grants or contracts, or any students participating in any federally funded or guaranteed Student Loan Program, must notify the University of any criminal drug statute conviction for a violation occurring at the University or while engaged in University activities. For more information, see www.cfo.pitt.edu/policies/procedure/06/06-02-01.html.

E-mail Communication Policy

The University of Pittsburgh has established e-mail as an official means of communication with students. For more information, see www.cfo.pitt.edu/policies/policy/09/09-10-01.html.

Faculty-Student Relationships

The University's educational mission is promoted by professional relationships between faculty members and students. Relationships of an intimate nature (that is, sexual and/or romantic) compromise the integrity of a faculty-student relationship whenever the faculty member has a professional responsibility for the student. The University prohibits intimate relationships between a faculty member and a student whose academic work, teaching, or research is being supervised or evaluated by the faculty member.

If an intimate relationship should exist or develop between a faculty member and a student, the University requires the faculty member to remove himself/herself from all supervisory, evaluative, and/or formal advisory roles with respect to the student.

Definition note: In this policy, the definition of faculty member refers to anyone appointed by the University as a teacher, researcher, or academic administrator, including graduate and undergraduate students so appointed. For complete text on this policy, see www.cfo.pitt.edu/policies/policy/02/02-04-03.html.

Family Educational Rights and Privacy Act (FERPA)

In compliance with the Family Educational Rights and Privacy Act of 1974, the University guarantees that students have the right to inspect all personally identifiable records maintained by the institution and may challenge the content and accuracy of those records through appropriate institutional procedures. It is further guaranteed by the University that student records containing personally identifiable information will not be released except as permitted by the Family Educational Rights and Privacy Act. See www.registrar.pitt.edu/ferpa.html for more information.

Statement of Compliance Regarding Satisfactory Academic Progress (SAP) for VA Educational Beneficiaries - 38 US Code Section 3675(b)

This policy applies to students who are VA beneficiaries and is intended to prevent the submission of VA-claims ("certifications") for those students who are suspended. Specifically:

- In this instance, VA beneficiaries are defined as students receiving VA educational benefits under Chapter-30, Chapter-33, Chapter-35 and Chapter-1606, Title 38 U.S. Code.
- Students placed on academic probation at the end of the term may be certified for VA educational benefits for the subsequent term. If the student does not meet satisfactory academic progress in that subsequent term-defined as attaining a cumulative GPA at or above 2.00 for full-time students or attaining a cumulative GPA at or above 2.00 after attempting 12 additional credits for part-time students-the university will immediately suspend further VA certifications on behalf of the student.
- Students returning from one calendar year of suspension must re-apply for admission to the university. If accepted, those students may be certified for VA educational benefits.

Certification of Chapter-31 students will be at the discretion of the student's VA vocational rehabilitation counselor.

Statement of Compliance Regarding VA Educational Beneficiaries - 38 US Code Section 3679(e)

As a matter of policy, the University of Pittsburgh allows students identified as *covered individuals** to attend and participate in all course(s) of education for any given term in which the student has been certified for VA educational benefits. This policy includes those circumstances in which VA payment(s) for student tuition and fees is late or delayed for up to 90 days after date of certification. The University retains the right to impose late fees upon those students who incur or retain an outstanding balance beyond the amount of expected VA tuition & fee payment for the term.

It is school policy to request all beneficiaries of VA educational benefits-including covered individuals*-provide the following documentation as part of certification process:

- VA Certificate of Eligibility (COE) or Statement of Benefits as printed from the VA.gov website
- Completion of a certification request form (in hard-copy or on-line), which includes biographical information necessary for submission in the VA's IT system of record-VA-Once.

Failure to provide such documentation will result in the delay of any VA claim or certification.

* Note: VA defines a **Covered Individual** as any individual who is entitled to VA educational assistance under the VA's Vocational Rehabilitation and Employment program (38 U.S. Code Chapter 31) or the VA's Post-9/11 GI Bill® (38 U.S. Code Chapter 33).

("GI Bill®" is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at www.benefits.va.gov/gibill.)

Harassment Policies

Harassment

No University employee, student, or individual on University property may intentionally harass or abuse a person (physically or verbally) with the purpose or effect of unreasonably interfering with such person's work or academic performance, or of creating an intimidating, hostile, or offensive work or academic environment.

Sexual Harassment

The University of Pittsburgh is committed to the maintenance of a community free from all forms of sexual harassment. Sexual harassment violates University policy as well as state, federal, and local laws. It is neither permitted nor condoned.

It is also a violation of the University of Pittsburgh's policy against sexual harassment for any employee or student at the University of Pittsburgh to attempt in any way to retaliate against a person who makes a claim of sexual harassment. Any individual who, after thorough investigation and an informal or formal hearing, is found to have violated the University's policy against sexual harassment will be subject to disciplinary action, including, but not limited to, reprimand, suspension, termination, or expulsion.

Any disciplinary action taken will depend upon the severity of the offense. For more information, see www.cfo.pitt.edu/policies/documents/policy06-05-01web.pdf.

Immunization Policy

The University requires the immunization of all incoming freshmen against measles, mumps, and rubella as a condition of attendance at the University of Pittsburgh. Incoming freshmen must provide to the University Student Health Service documentation of immunization that includes the month, day, and year that the immunizations were administered. Completed immunization forms must be kept on file in the Student Health Service.

Exemptions may be granted based on a written statement from a physician that the immunization may be detrimental to the health of the student or on a student's objection to immunization on religious grounds or on the basis of a strong moral or ethical conviction similar to a religious belief. However, if an outbreak of measles, mumps, or rubella occurs, the State Health Department may exclude from classes students who do not provide proof of immunity to these diseases. For more information, see www.cfo.pitt.edu/policies/policy/06/06-01-02.html.

Patent Policy

A University student, during his or her period of enrollment, may be responsible for new discoveries and inventions that could have commercial value and contribute to scientific, technological, social, and cultural progress. Those accomplishments should be patented in the best interest of the student, the University, the public, and the government. The University's policy on patents determines the rights and obligations of the student and the University in any technology the student may invent while enrolled in the University. Details of this University policy are available from the Office of Technology Management or at www.cfo.pitt.edu/policies/policy/11/11-02-01.html.

Research Integrity

The University of Pittsburgh seeks excellence in the discovery and dissemination of knowledge. Excellence in scholarship requires all members of the University community to adhere strictly to the highest standards of integrity with regard to research, instruction, and evaluation. Research misconduct carries potential for serious harm to the University community, to the integrity of science, and to society as a whole. The University's Research Integrity Policy is available online at www.cfo.pitt.edu/policies/policy/11/11-01-01.html.

Smoking Policy

Smoking is prohibited in all University-owned and -leased facilities, including residence halls and off-campus housing facilities, and in all University vehicles, including motor pool vehicles, campus buses, and vans, with explicit limited exceptions described in University Policy 04-05-03. For complete policy text, see www.cfo.pitt.edu/policies/policy/04/04-05-03.html.

Student Service Indicators Policy

Access to many student services including registration and access to grades may be delayed for a number of reasons ranging from financial liability to missing data. Complete information on this policy is available online at www.cfo.pitt.edu/policies/policy/09/09-04-09.html.

Use of Alcohol Policy

The University of Pittsburgh prohibits use and dispensing of alcohol in compliance with the laws of the Commonwealth of Pennsylvania. For more information, see www.cfo.pitt.edu/policies/policy/04/04-05-02.html.

Application for Admission

Most undergraduate admissions to the University of Pittsburgh's Pittsburgh campus are handled by the Office of Admissions and Financial Aid. This section details the general requirements and procedures for admissions to the University through that office and also provides admissions information for prospective students whose applications are not handled by that office. Some schools and programs require supplemental application materials or admission requirements in addition to those requested by the Office of Admissions and Financial Aid. Those requirements are listed within the Schools and Academic Programs section of this bulletin.

The admissions information in this section is subject to change at any time. It is intended to serve only as a general source of information.

Pittsburgh Campus First-Year Student Admissions

Prospective students who have not earned college credits since graduating from high school with a diploma or GED should consult this section for information on admission to the University of Pittsburgh.

Admissions Contact Information

University of Pittsburgh
Office of Admissions and Financial Aid
Alumni Hall
4227 Fifth Ave.
Pittsburgh, PA 15260-6601
412-624-PITT (7488)
Admissions: oafa@pitt.edu
Financial Aid: finaid@pitt.edu
oafa.pitt.edu

High School Preparation

First-Year Student applicants to the University of Pittsburgh should have completed a minimum of 15 units of credit in college preparatory courses. Flexibility exists within this requirement, however:

- Swanson School of Engineering applicants should have completed four units of mathematics through trigonometry/pre-calculus-as well as a unit each of chemistry and physics.
- School of Nursing applicants should have three units of laboratory science, including one year of chemistry with a lab, and four units of mathematics.
- School of Pharmacy applicants seeking first-year student guaranteed admission should have completed one year of high school biology with laboratory, chemistry with laboratory, and either a second-level biology course, second-level chemistry course.
- Dietrich School of Arts and Sciences applicants should have completed three years of mathematics, three years of science (with labs), and three years of a single second language with a B average or better (or make up the deficit with one year of college-level study).
- College of Business Administration applicants should have completed four units of mathematics, including algebra I and II and geometry, and another math course such as trigonometry, pre-calculus, or calculus in their senior year, as well as two years of a lab science.

Application Procedures

Students seeking admission to the University of Pittsburgh must complete the online application, a Self-Reported Academic Record or an official high school transcript, SAT or ACT results, and the $45 application fee. The Short Answer Questions, included with the First-Year Student Application, are optional but required for scholarship candidates.

Exceptions: Applicants to the Dental Hygiene Program, and students seeking special or non-degree status should see the application procedures outlined under their respective admissions sections (Dental Hygiene Program-School of Dental Medicine Admissions, and Special and Non-Degree Status).

Application Deadlines

The University of Pittsburgh practices a rolling admissions policy, meaning there is not a specific deadline by which prospective students must apply. Applicants are considered and informed of admission decisions on a first-come, first-served basis. However, applicants who want to be automatically reviewed for institutional merit scholarships must submit applications by December 15. See Academic Merit Scholarships.

Note: International students must apply by:

- April 1: for fall and summer term admission
- October 1: for spring term admission

Academic Merit Scholarships

Applicants are automatically considered for Pitt academic merit scholarships if their applications and all supporting materials are received by December15. The University awards hundreds of academic scholarships, all of which are renewable for three years after the first year, provided the student maintains satisfactory academic progress and is enrolled full-time.

Graduate School Guarantees

Outstanding first-year students applicants who indicate certain professional programs as their intended field of study on their application will automatically be reviewed for guaranteed admission into that professional program. We offer guarantees for 18 graduate programs, including business, law, medicine, dental medicine, and physician assistant studies.

A separate application is not necessary, although some programs have additional application requirements. Pitt First-Year Students Guarantees are competitive, so we highly recommend you apply for admission early in your senior year of high school. Early application is recommended as spaces are limited. Please note that the Medical School Guarantee has a deadline of November 15.

Enrollment Fee/Tuition Deposit

Once accepted, students must reserve their positions in the upcoming class by submitting a nontransferable, nonrefundable $300 enrollment fee by May 1 for the fall term. This fee is a combined $100 tuition deposit and a $200 PittStart fee). Residence hall accommodations on the Pittsburgh campus are guaranteed to first-year students admitted for the fall term who pay the $300 enrollment fee by May 1. Housing is guaranteed for three full years from the time admission is offered. After that housing is available on a first-come, first-served basis.

Deferred Admission

First-Year Student applicants who are interested in deferring University of Pittsburgh admissions may do so for up to one academic year following the term for which admission was offered, provided the enrollment fee has been paid by the May 1 deadline.

Examples of deferrals may include, but are not limited to a religious activity, community service, or world travel. Students may only defer to the same term as their original admission. For example, spring term admission students may only defer to the following spring term.

International first-year students are eligible for deferral but must work with the Office of International Services regarding visas.

Regional Campus Admissions

Listed below is the contact information for the admissions offices of the University of Pittsburgh's four regional campuses. Contact the regional campuses for more information on their particular requirements:

University of Pittsburgh at Bradford

Office of Admissions and Financial Aid
300 Campus Dr.
Bradford, PA 16701-2898
1-800-872-1787
admissions@upb.pitt.edu
upb.pitt.edu

University of Pittsburgh at Greensburg

Office of Admissions
Rossetti House
150 Finoli Dr.
Greensburg, PA 15601-5898
724-836-9880
upgadmit@pitt.edu
upg.pitt.edu

University of Pittsburgh at Johnstown

Office of Admissions
157 Blackington Hall
450 Schoolhouse Rd.
Johnstown, PA 15904
814-269-7050
upjadmit@pitt.edu
upj.pitt.edu

University of Pittsburgh at Titusville

Office of Admissions and Financial Aid
504 E. Main St.
Titusville, PA 16354
814-827-4509
uptadm@pitt.edu
upt.pitt.edu/

Transfer Student Admissions

Prospective students who are high school graduates and have attended postsecondary institutions, colleges, or universities (except those who took college classes while in high school and are considered first-year students with advanced standing) apply for admission as transfer students through the Office of Admissions and Financial Aid. Transfers between University of Pittsburgh schools or campuses are handled through the school or campus.

Application Procedures

Degree-seeking transfer students who wish to be considered for admission to the University of Pittsburgh must complete an online application, an official high school transcript or GED, an official transcript from each postsecondary institution attended (whether or not it is intended that all courses will be counted toward a degree at the University of Pittsburgh), official SAT or ACT test result score if either test was taken, and the $45 application fee.

Exceptions: Applicants to the Dental Hygiene Program, and students seeking special or non-degree status should see the application procedures outlined under their respective admissions sections (PharmD Program, Dental Hygiene Program-School of Dental Medicine Admissions, and Special and Non-Degree Status).

NOTE: International transfer students must apply online.

Admission Deadlines

The University of Pittsburgh practices a rolling admissions policy, meaning there is not a specific deadline by which transfer students must apply. Applicants are considered and informed of admission decisions as they apply. The following schools practice rolling admission for all three terms, except where noted: Dietrich School of Arts and Sciences, College of Business Administration, Swanson School of Engineering, College of General Studies, School of Nursing (fall and spring term admission only) and the School of Social Work (fall and spring term admission only). However,

there are several schools and programs that have definitive deadlines by which applications must be submitted for consideration. You can verify deadlines for your school of interest online.

NOTE: International applicants must apply by the deadlines specified or the specific program deadline, whichever comes first.

Articulation Agreements and Transfer Credit Guide Summaries

The University of Pittsburgh has formal articulation agreements with various higher education institutions throughout the state of Pennsylvania to facilitate the transfer of students from one institution to the other as they pursue their educational goals. The table lists the current articulation agreements and their specific requirements.

Transfer Scholarships

Transfer scholarships are available to College of General Studies students who are U.S. citizens and eligible non-citizens. Degree-seeking applicants are automatically reviewed for eligibility. These annual scholarships range in value from $600 to $2,500. The scholarships are offered through: the CGS Alumni Endowment Scholarship Fund including John O. Bolvin and Anne E. Levenson scholarships, The Brackmann and Saalbach Family Endowed Scholarship, Joan C. Dash Scholarship, Bruce P. McGough Scholarship, Tom R. Slone Scholarship (designated for students who are active in the Big Brothers Big Sisters youth mentoring organization), and the Grace C. Stewart Fund. Awarding of these scholarships is handled through the Office of Admissions and Financial Aid.

Evaluation of Transfer Credits

Credits earned at another accredited institution are evaluated by the admitting school, which determines the number of advanced standing credits the transfer student will be awarded and the distribution of these credits in relation to the school's degree requirements and University policy. See the appropriate school's information in this bulletin.

Deferred Admission

The University does not offer deferred admission for a subsequent term to admitted students not enrolling for the term of their admission. However, students wishing to have their applications re-reviewed for another term may submit a request in writing to the Office of Admissions and Financial Aid.

Readmission

Students who previously attended the University of Pittsburgh then attended other institutions and wish to return to the University are considered transfer students and must reapply following the guidelines for transfer students. The admitting school will evaluate the credits previously earned at the University of Pittsburgh along with credits earned elsewhere to determine the number of credits the transfer student will be allowed. Acceptable credits from institutions other than Pitt will appear on the student transcript as advanced standing credits and will not count in the GPA calculation. Credits earned at the University of Pittsburgh will appear as term entries on the student transcript, and courses accepted toward the degree will be used when calculating the student's GPA.

Former University of Pittsburgh students who have not attended another institution may be reinstated through the dean's office of the school in which they were previously enrolled.

Dental Hygiene Program-School of Dental Medicine Admissions

The School of Dental Medicine offers a two-year (six consecutive terms) Associate of Science Degree in Dental Hygiene. The program is designed to fulfill the professional and academic requirements of the Commission on Dental Accreditation. Completion of the program prepares the student for licensure as a dental hygienist in most states.

Admissions Contact Information

University of Pittsburgh
School of Dental Medicine
Dental Hygiene Program
B-82 Salk Hall
Pittsburgh, PA 15261-1937
412-648-8432
hygieneadmissions@pitt.edu
dental.pitt.edu/students/dental-hygiene-program

Admission Requirements

Applicants to the Dental Hygiene Program must fulfill the following criteria before applying: have a high school diploma, have a minimum GPA of 3.0 at all academic institutions, have a minimum SAT I combined math and verbal score of 1200 or ACT score of 24, have successfully completed chemistry and biology courses with laboratory components, and have successfully completed a college-level English composition course and a college-level introduction to sociology course.

Application Procedures

Applicants to the Dental Hygiene Program must submit the following items to the School of Dental Medicine by November 1 for early decision review: a completed Dental Hygiene Program application, including the Personal Essay; three professional references; transcripts from all academic institutions attended; 15 hours of job shadowing with a practicing dental hygienist; and SAT I/ACT scores. Once the application materials have been received, the qualified applicant will be invited to attend a mandatory Applicant Seminar and participate in a personal interview with the admissions committee.

Students who complete this program also have the option of completing a Bachelor of Science in Dental Hygiene offered by the College of General Studies (see the College of General Studies listing in the Schools and Academic Programs section of this bulletin for information on BS degree completion option).

School of Nursing-RN Options (Early admissions To MSN Or DNP)

The University of Pittsburgh RN Options (Early Admission to MSN or DNP) curriculum is designed for registered nurses, who obtained their initial nursing education through either a CCNE, ACICS or ACEN [NLN] accredited diploma or associate degree or diploma program and want to pursue undergraduate education with early admission to graduate nursing program. Courses are taught by nursing leaders who are experts in their field. Faculty serve as educators, role models and mentors for their students. The RN Options curriculum builds upon the individual professional nurse's strengths and experiences to expand professional knowledge and practice skills. Graduates of the University of Pittsburgh School of Nursing possess critical appraisal/thinking skills, sophisticated clinical practice knowledge, and the ability to integrate the latest research findings to provide quality, safe and effective patient care.

Course offerings are flexible and students may begin coursework in any term (fall/spring/summer).

Applicants should apply using the online application.

Contact Information

University of Pittsburgh
School of Nursing
239 Victoria Hall
Pittsburgh, PA 15261
1-888-747-0794 or 412-624-4586
sao50@pitt.edu
www.nursing.pitt.edu

Admission Requirements and Application Procedures

Application Guidelines

RN-MSN or DNP early admission track:

- Successful completion of a nursing diploma or associate degree program submitting official Transcripts from institution.
- Cumulative Grade Point Average (GPA) of 3.0 for previous college and/or coursework, which must be semester credits or the equivalent.
- Copy of current RN license (All students must obtain a Pennsylvania license) (students may be permitted to take theory courses only until evidence of successful completion of NCLEX is provided)
- Successful completion of all prerequisite courses
- ≥ 3.0 GPA in Associate Degree or nursing diploma (from ACEN (NLN), ACICS, or CCNE accredited program)
- Graduate Record Exam (GRE) :

MSN track - may be waived if the RN program GPA is 3.5 or higher; or DNP track - no waiver, Verbal & Quantitative sections (competitive score), Analytical Writing (≥ 3)

- Brief type written essay (as needed DNP project statement)
- Current resume
- Three letters of professional recommendation, one from current manager
- Completed online application
- International applicants: consult nursing.pitt.edu & ois.pitt.edu

Formal interview*

Applicants must meet the admission criteria for the BSN Program and simultaneous conditional admission to the preferred graduate program. If admitted they will complete the remaining 24 credits will be at the graduate level. Full and part-time schedules are available.

*Potential students will meet with the RN Options Coordinator for an interview and must meet with the coordinator of the graduate program.

School of Nursing - Accelerated 2nd Degree BSN Program

The Accelerated 2nd Degree BSN is designed to enable individuals with a Baccalaureate Degree in another discipline the ability to earn a Bachelor's of Science Degree in Nursing (BSN) in three consecutive full-time terms. The Accelerated 2nd Degree BSN requires 122 credits: 31 credits from a previous degree, 36 to 38 prerequisite credits, and 54 curriculum credits. The curriculum is fast-paced and designed to build upon the individual's previous education while providing additional science and nursing content. At the completion, graduates are eligible to take the National Council Licensure Examination (NCLEX) to become Registered Nurses (RN).

Admission to the Accelerated 2nd Degree BSN is competitive and is based upon proven academic achievement and grades earned in prerequisite courses. The school admits three cohorts, Fall, Spring and Summer.

Contact Information

University of Pittsburgh
School of Nursing
239 Victoria Hall
Pittsburgh, PA 15261
1-888-747-0794
sao50@pitt.edu
http://www.nursing.pitt.edu

Admission Requirements and Application Procedures

The Accelerated 2nd Degree BSN requires an applicant to complete 36 prerequisite credits. These courses may be taken at any college or university. Courses from other institutions must be evaluated as equivalent to University of Pittsburgh courses. (Coursework taken at the University of Pittsburgh School of Nursing prior to admission may be taken as a non-degree seeking student.)

Required prerequisites include:

Course	**Credits**
General and Biological Chemistry *+*(includes a lab)*	4
English Composition (scientific/technical)	3

Directed Elective	3
Psychology	3
Sociology	3
Statistics *(descriptive, probability, & inferential)*	3
Human Anatomy & Physiology *+ *(includes a lab)*	6 - 8
Human Genetics *+	3
Microbiology *+ *(includes a lab)*	4
Pathophysiology	4

*Should have been completed within the past ten years
+Should have achieved a grade of "B-" or better

Application Deadlines and Other Information

Early submission of an application is recommended. New classes begin in the Fall, Spring and Summer term. Accelerated 2nd Degree BSN applications are reviewed, and admission decisions made, based on the application deadlines: Fall Term -- February 15/June 1; Spring Term--June 1/October 1; Summer Term--October 1/February 15.

Prospective students must apply online to the School of Nursing.

School of Pharmacy PharmD Program

Transfer students, both within the Pitt system and from other colleges and universities, applying for admission to the School of Pharmacy must: (1) file an online PharmCAS application with all supporting credentials by the deadline; and (2) submit a School of Pharmacy Supplemental Application by the deadline specified in the online instructions. For more information on deadlines, online applications, admission calendar, and application instructions, please visit the school's "Admission Process" Web site.

Transfer within University Schools and Regional Campuses

Transfer between Schools

Students enrolled in an undergraduate school of the University who wish to transfer to another undergraduate school at the University should contact the school in which they are currently enrolled to request a transfer of their records. The student's records will be evaluated by the receiving school, which will then notify the student of acceptance or rejection.

Transfer between Campuses

Students enrolled in one campus of the University who wish to transfer to another campus of the University should contact the school at the campus in which they are currently enrolled to request a transfer of their records. The receiving schools will evaluate the records and notify students of acceptance or rejection.

Reinstatement

Students who have left the University for one calendar year or more (whether of their own volition or as a result of a suspension) and who wish to continue their studies must apply for reinstatement through the school to which they were previously admitted.

Second-degree Candidates

Previous Degree Earned Elsewhere

Students who have earned a previous undergraduate degree from an institution other than the University of Pittsburgh and wish to earn a second degree are treated as transfer students and must apply through the Office of Admissions and Financial Aid. (See Transfer Student Admissions.)

Previous Degree Earned at the University of Pittsburgh

Students who have earned an undergraduate degree from a school or campus of the University of Pittsburgh and who now wish to earn another bachelor's degree should apply as second-degree students directly through the desired school. This process may vary with some upper-level division schools.

Each school determines the number of previously earned credits that will apply. A minimum of 30 new credits must be earned to receive a second degree. In addition to those general rules, schools may have other requirements.

Special and NonDegree Admissions

College in High School

The College in High School Program, offered through the Dietrich School of Arts and Sciences, offers qualified area high school students the opportunity to earn college credits from the University during their regular school day. Courses in chemistry, communication, computer science, French, Latin, mathematics, physics, and statistics are offered. There is a registration process and fee for this program. For further information, contact the College in High School office at 412-624-6828.

Postbaccalaureate Students

Some of the schools at the University will allow students who have already earned a bachelor's degree to take courses at the University as nondegree students. Students should contact the appropriate school for information about admission requirements.

Students interested in the Dietrich School of Arts and Sciences or the College of General Studies should contact the College of General Studies, 412-624-6600, 407 Cathedral of Learning; College of Business Administration students should contact 412-383-9600, 2100 Sennott Square; Swanson School of Engineering students should contact the Engineering Administration Office 412-624-9800, 253 Benedum Hall.

NOTE: International applicants should file an online application.

Guest/Visiting Students

Guest students are those who are seeking a degree at another university but want to take courses at the University of Pittsburgh for credit with the expectation that the credits will transfer back to the student's home institution. Guest students must be in good academic standing and generally must apply at least a few weeks before the start of a given term. Contact the appropriate school for other admission requirements. Admission for the fall and spring terms is handled through the school. Summer admission for visiting students is handled through the College of General Studies.

NOTE: International applicants should file an online application.

Summer Visiting Students

Students who are seeking a degree at another university but want to take courses at the University of Pittsburgh for credit during the summer should apply through the College of General Studies (CGS). Contact CGS at 412-624-6600.

EXCEPTION: International students

Campus Facilities and Student Services

Academic Resources

A strong infrastructure of services is key to ensuring academic success at any institution of higher learning. The University of Pittsburgh has a wide variety of academic resources that provide that infrastructure to aid students with their research, computing, tutoring, and advising needs.

University Library System

271 Hillman Library
412-648-7710
feedback@library.pitt.edu
www.library.pitt.edu

The University of Pittsburgh libraries and collections provide an abundant amount of information and services to the University's students, faculty, staff, administrators, and researchers. In fiscal year 2007, the University's 28 libraries and collections have surpassed 5.1 million volumes. In addition, they contain more than 5 million pieces of microforms, and more than 48,000 current serials.

Under the administration of the Hillman University Librarian and Director, the University Library System (ULS) includes the following libraries and collections: Hillman (main), African American, Allegheny Observatory, Archives Service Center, Buhl (social work), Center for American Music, Chemistry, Darlington Memorial (American history), East Asian, Engineering (Bevier Library), Frick Fine Arts, Government Documents, Katz Graduate School of Business, Langley (biological sciences, behavioral neuroscience), Mathematics, Music, Public and International Affairs/Economics, and Special Collections. Libraries are also located at each of the University's four regional campuses. The ULS maintains a high-density storage area at the Library Facility in the Point Breeze section of Pittsburgh.

The Hillman Library is the largest facility, with seating for 1,530 users. It offers an open stack arrangement and an extensive range of library services. Hillman Library houses collections in the humanities and social sciences and includes area studies, psychology, computer science, maps, and government documents. In addition to the ULS, the University offers the Barco Law Library and the Health Sciences Library System.

The Health Sciences Library System (HSLS) at the University of Pittsburgh comprises several libraries that support the educational, research, patient care, and service activities of the schools of the health sciences (Medicine, Dental Medicine, Pharmacy, Health and Rehabilitation Sciences, Nursing, and Public Health) as well as the hospitals of the University of Pittsburgh Medical Center. The HSLS includes Falk Library of the Health Sciences, The Western Psychiatric Institute and Clinic Library, The Libraries at UPMC Shadyside, and the Children's Hospital of Pittsburgh Libraries. The Computer and Media Center in Falk Library is the primary health sciences facility and service point for audiovisual and microcomputer resources. HSLS Online (www.hsls.pitt.edu) is the gateway to extensive electronic resources for clinical and research needs.

This year, the University of Pittsburgh's online library catalog, PITTCat, which provides access to materials held in all University libraries, has been updated. PITTCat+ now offers, in addition to the more than five million titles from PITTCat Classic, all items from the D-Scribe Digital Collections, along with enhanced book content such as integrated article searching, access to tables of contents, jacket covers, and book reviews. Further features are a word cloud of associated search terms, spelling variants, translated terms, and thesaurus terms, as well as refined search options that allow searches based on library location. Searches can also be saved as an RSS feed that will send notifications when new items are added to the catalog.

The ULS also provides access to a comprehensive journal and magazine article discovery tool, Zoom!, as well as other online resources such as: Web of Science, Science Direct, and Scopus in the physical sciences; PsycINFO, ERIC, and Congressional Quarterly for the social sciences; Historical Abstracts, Philosopher's Index, and RILM Abstracts of Music Literature in the arts and humanities; and additional collections of article and newspaper databases from EBSCO and Lexis-Nexis.

These and hundreds of other online resources are available via the Pitt Digital Library at www.library.pitt.edu. The University of Pittsburgh is a member of the Association of Research Libraries. Through membership in several Pennsylvania consortia of libraries (PALCI, PALINET, and the Oakland Library Consortium), cooperative borrowing arrangements have been developed with other Pennsylvania institutions.

Information Technology (CSSD)

Walk-In Support Desks
Litchfield Towers Lobby
University Store on Fifth
412-624-HELP (4357)
technology.pitt.edu

University of Pittsburgh students have access to the latest information technology resources provided by Computing Services and Systems Development.

Connect to Wi-Fi

Depending on location, you'll find one of two networks on campus: PittNet in academic and administrative buildings-including the William Pitt Union-and MyResNet in all rooms, common areas, and dining facilities in residence halls. pi.tt/pittnet

Sign In Once, Authenticate Twice

Use Pitt Passport single sign-on to access many of the University's web-based services. Download the Duo Mobile app to verify your identity with multifactor authentication. For services that don't use single sign-on, Pitt Password Manager creates strong, unique passwords and saves them in a secure vault-that you can access from any device-using a single master password. pi.tt/passport

Log In to Your Pitt Email

Your email address begins with your University Computing Account username: *abc123*@pitt.edu. The email account is yours to keep, even after you graduate. pi.tt/emailsetup

Install Free Software-Including Office

Install the software you need at no charge, including Microsoft Office, Antivirus (Symantec Endpoint Protection), Anti-Malware (Malwarebytes), and nearly 70 additional titles. Gain cloud-based access to even more applications via Office 365 ProPlus, along with Office apps for Android and iPhone. pi.tt/studentsoftware

Browse the Pitt App Center

Fine nearly 50 free University-related iOS and Android apps for doing everything from viewing class assignments to checking the Panthers' score. pi.tt/appcenter

Find Focus in Student Computing Labs

Eight computing labs around campus-some open 24 hours a day-provide convenient access to Windows and Mac computers with a variety of software, as well as scanners, printers, charging stations, and space to use your own device. What's more, computer kiosks throughout campus provide a quick alternative for getting online if you forget your phone or your battery dies. pi.tt/labs

Print from Your Laptop or Smartphone

It's easy to print to any of the 80 print stations across the Pittsburgh campus. Download the Pitt Print Client from software.pitt.edu to print from your computer. Using a phone or tablet? Simply email the file to mobileprint@pitt.edu or colorpint@pitt.edu. Alternatively, visit print.pitt.edu to upload files and manage your Pitt Printing account. pi.tt/print

Manage Your Academics

Register for classes, message the instructor, get assignments, and see grades using the Pitt PS Mobile and Courseweb (Blackboard) apps. pi.tt/courseapps

On-Demand Learning

Brush up on your tech skills, learn a new topic or take up a new hobby with thousands of free courses offered through LinkedIn Learning. pi.tt/linkedin

Cloud Storage & Collaboration

Store, work on, and share files in real time, from any device, using Box and/or Microsoft OneDrive. pi.tt/collaboration

Discover Additional Online Services

Whether you need help connecting to PittNet Wi-Fi, finding a campus shuttle, or loading Panther Funds, AskCathy Service Discovery (askcathy.pitt.edu) can help you quickly find online University resources. pi.tt/askcathy

Get Help When and How You Want It

The 24/7 IT Help Desk is your central point of contact for all Pitt Information Technology services. Get fast and friendly support via phone, chat, email, walk-in locations, or an online form-even on holidays. pi.tt/help

Writing Center

Writing Center
317B O'Hara Student Center
412-624-6556
writingcenter.pitt.edu

The Writing Center provides a place for all University of Pittsburgh students to come to work on their writing. The Center is staffed by experienced consultants who have been trained to help others with their writing. The Center also offers Writers' Café (for anyone interested in the craft of creative writing) and International Café (for international undergraduate and graduate students). Online tutoring is available for students who are off campus. For more information (including our schedule of events) or to make an appointment, visit our website.

English Language Institute

M13 Parkvale Building
412-624-5901

The English Language Institute (ELI) is part of the Department of Linguistics and offers a variety of English-as-an-additional-language courses and programs, as well as courses and support for matriculated students at the University and expertise for other University-related endeavors that involve English language learners and Teaching English to Speakers of Other Languages (TESOL).

Non-Credit English Classes

- Speaking, listening, writing, reading, and grammar courses in English for speakers of other languages from abroad and the local international community who want to improve their English for academic, professional, or personal reasons
- Admission to the ELI's non-credit courses and programs does not include admission to the University of Pittsburgh.

Support for Matriculated Students at the University of Pittsburgh

- English proficiency testing of non-native speakers of English who are matriculating in University programs
- Credit and non-credit English language support courses for matriculated students and teaching assistants/fellows who are non-native speakers of English
- Specialized English instruction to University programs by request
- Assessment of teaching assistants/fellows who are non-native speakers of English to ensure compliance with the legal requirements of the Commonwealth of Pennsylvania
- Teacher training, internships, and research opportunities for matriculated students in University programs in the areas of Applied Linguistics and TESOL
- Expertise for various other University-related endeavors that involve English language learners and TESOL

Additionally, the ELI actively participates in and contributes to the development of the field of English for speakers of other languages, especially in areas of classroom instruction, second language learning and acquisition, curriculum design, program structure, and administrative practices. For more information about the English Language Institute, contact elipitt@pitt.edu, visit www.eli.pitt.edu, or call 412-624-5901.

Housing

The University provides a variety of housing options and support services to students, including Residence Life and Off-Campus Living. Students may choose to live on campus in University-owned housing or in off-campus housing.

Housing Application Process

Incoming Students

As part of the admissions process, the University provides entering freshmen with a three-year housing guarantee, provided they

- Have been admitted through the Office of Admissions and Financial Aid and their tuition deposit has been received by May 1, and
- Have submitted their Housing/Dining Services Application, contract, and deposit by the due date.

Returning Guaranteed Students

Students who have lived in University housing during their first year with a housing "guarantee" are guaranteed housing for their second and third years at the University provided that they

- Maintain their status as current and continuing full-time undergraduate students in each successive year and
- Currently reside in University Housing and meet all housing requirements (application, contract, deposit, and due date) in each successive year.

The housing application process takes place each spring and is administered by Panther Central, which is located in the Litchfield Towers main lobby. For all housing information, stop in or call Panther Central at 412-648-1100 or visit https://www.pc.pitt.edu/housing-services.

Residence Life

The director and assistant directors of Residence Life are responsible for resident assistants and resident directors, who work with students as their live-in advisors and resource persons within the residence halls. The office also advises the Resident Student Association (RSA), the Residence Life governing body. The staff offers a variety of educational and social activities within the residence halls, addresses student counseling and conduct issues, and provides other assistance to residents on matters affecting the quality of life in the residence halls.

Residence Life also offers students opportunities to live in focused living learning communities, which are linked with specific academic departments. Residence Life staff provide personal assistance 24 hours a day, seven days a week. For more information, students should contact the resident director in their hall, visit or call the office in 203 Bruce Hall (412-648-1200/1201), or go to www.reslife.pitt.edu.

Off-Campus Living

The Off-Campus Living (OCL) Center provides assistance to students, staff, and faculty in identifying, renting, leasing, or purchasing suitable living accommodations. Off-Campus Living provides the following: information on Universityowned apartments, an apartment roommate matching service, a sublet service, maps of Pittsburgh and surrounding areas, rental tips, campus shuttle schedules, free local telephone service to contact landlords, and listings of apartments inspected and approved by the City of Pittsburgh. Call 412-624-6998, visit the office at 204 Brackenridge Hall, 3959 Fifth Avenue, or go to www.ocl.pitt.edu.

Student Resources

The University is committed to providing a high quality of life for its students and toward that end supports a variety of offices and activities designed to aid students in realizing their potential and having a fulfilling on-campus life.

Affirmative Action

In addition to its work with developing, implementing, and monitoring the University's affirmative action program, the Office of Affirmative Action is responsible for receiving, investigating, and mediating complaints from any members of the University community who believe they have been discriminated against or harassed on the basis of their race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, gender identity or expression, disability, or status as a disabled veteran or a veteran of the Vietnam era. Individuals may request information and advice anonymously if they wish. The privacy of all parties will be respected. The office is in 412 Bellefield Hall, 315 S. Bellefield Ave.; the phone number is 412-648-7860.

Athletics

The University offers a variety of opportunities for students to participate in athletics on the varsity, intramural, and club levels, as well as on-campus facilities for group sports and individual exercise.

Varsity Sports

The University offers 10 sports for men (baseball, basketball, cross country, diving, football, soccer, softball, swimming, indoor and outdoor track, and wrestling) and nine sports for women (basketball, cross country, diving, gymnastics, soccer, swimming, tennis, indoor and outdoor track, and volleyball) at the varsity level as well as cheerleading activities. For more information about these sports and contact numbers for varsity coaches, call 412-6488200 or visit the Pittsburgh Panthers Web site at www.pittsburghpanthers.com.

Intramural and Club Sports

New outdoor playing fields are available behind the renovated Cost Sports Center. Call 412-648-8210 for more information or visit the intramural program's Web site at www.intramurals.pitt.edu.

Sports clubs offer participation in sports ranging from bowling to rowing. Contact the Student Organization Resource Center (833 William Pitt Union, 412-624-7116) for more information on sports clubs or visit the Web site at www.sorc.pitt.edu.

Sports Facilities

There are a variety of sports facilities available for use by individuals and groups. Fitness centers are available in Litchfield Towers, Schenley Quadrangle, Lothrop Hall, Sutherland Hall, Bellefield Hall, Trees Hall, and the Baierl Student Recreation Center in the Petersen Events Center. Gymnasiums and swimming pools are available in Trees Hall and Bellefield Hall. The Baierl Student Recreation Center has two convertible racquetball/squash courts and four racquetball courts. In addition, eight squash courts are available in the Fitzgerald Field House, and soccer fields are available through the Department of Athletics.

Visit www.intramurals.pitt.edu for a virtual tour of the facilities, reservation information, and hours of operation.

Book Centers

The University owns and operates two bookstores on campus: The Book Center and The Health Book Center. The Book Center, at 4000 Fifth Ave., carries textbooks for most University courses, as well as a general book selection, school supplies, and sundries such as art supplies, stationery, greeting cards, and calendars. Call 412-648-1455 or visit http://www.pittuniversitystore.com/home.aspx for more information. The Health Book Center, at 3527 Forbes Ave., carries all course books for the Schools of Medicine, Dental Medicine, Health and Rehabilitation Sciences, Nursing, and Pharmacy, as well as the Graduate School of Public Health. Call 412-648-8915 or visit http://www.pittuniversitystore.com/home.aspx for more information.

The University Counseling Center

The University Counseling Center, in 334 William Pitt Union, is staffed by licensed psychiatrists, psychologists, social workers, and counselors who provide a variety of services for undergraduate and graduate students. All services of the center are accredited by the International Association of Counseling Services and are confidential, free, and voluntary.

We provide individual, couples, and group counseling for students seeking assistance for relationship problems, anxiety, depression, stress, and concerns about academic progress or direction. We also provide psychiatric services and medication management for currently enrolled students. Special services such as sexual assault counseling and advocacy are provided through the center's Office of Sexual Assault Services. In addition, drug and alcohol assessments and counseling are provided at the center.

For information about the center and its services, see www.counseling.pitt.edu. To schedule an appointment, call 412-648-7930.

Sexual Assault Services/University Counseling

The Office of Sexual Assault Services provides individual and group counseling designed to alleviate the trauma associated with sexual victimization. Emergency medical, legal, and police support is provided. Students are assisted in negotiating course schedules or room changes and in obtaining medical, legal, and counseling resources available to them in the University and local communities.

The Office of Sexual Assault Services also sponsors Peers 2 Peers. This is a volunteer student outreach program whose mission is to create an awareness of the dynamics of sexual assault on the Pittsburgh campus, promote effective communication, and prevent sexual victimization through educational programming. For more information, call 412648-7856 or 412-648-7930, visit 334 William Pitt Union, or see http://www.saserv.pitt.edu.

Disability Resources and Services

The Office of Disability Resources and Services (DRS) provides a broad range of support services to assist students with disabilities. Services include, but are not limited to, tape-recorded textbooks, sign language interpreters, adaptive computer technology, Braille translation, and nonstandard exam arrangements. Contact DRS at 412-648-7890 or 412383-7355 (TTY) in 140 William Pitt Union or see www.drs.pitt.edu for more information.

Dining Services

Campus Dining Services offers students a variety of dining options. All student dining services are coordinated and administered through Panther Central, which is located in the Litchfield Towers main lobby. All students residing in residence halls are required to purchase a meal plan. Students living in University apartment-style accommodations may purchase a meal plan but are not required to do so. Students can select from a variety of meal plans, each offering different combinations of dining passes and dining dollars. Campus Dining Services invites you to check out all of our dining options across campus.

Major Residence Hall Dining Facilities

- Market Central in Litchfield Towers
- The Perch at Sutherland

Retail Operations

- Quick Zone in Litchfield Towers and Sutherland Hall
- Market to Go in Litchfield Towers
- Schenley Café in William Pitt Union
- Cathedral Café in the Cathedral of Learning
- Petersen Events Center Food Court
- Starbucks Coffee Carts across campus
- Einstein Bros. Bagels in Posvar Hall and Benedum Hall

For all dining information, stop in or call Panther Central at 412-648-1100 or visit www.pc.pitt.edu/dining/index.html.

Health Care and Student Health Service

All full-time students pay a student health fee each term to cover a variety of services at the Student Health Service in Suite 500 of the Medical Arts Building, 3708 Fifth Ave., Pittsburgh, PA 15213. The Student Health Service is a multiservice health care facility that offers outpatient clinical services, gynecology, and comprehensive health education programs. Call 412-383-1800 or visit www.studenthealth.pitt.edu for more information.

The University of Pittsburgh Pharmacy, in the same suite as the Student Health Service, offers over-the-counter and prescription medicines, often at lower prices than available elsewhere. Call 412-383-1850 or visit www.studentaffairs.pitt.edu/shspharmacy for more information.

Students should have health insurance to protect themselves in the event of illness or injury. A direct-pay medical insurance plan is available to students through University health plans. The plan is designed to provide insurance benefits for services not offered at the Student Health Service as well as for hospitalization and emergency care. Applications and product information are available at the Student Health Service.

ID Cards (Panther Cards)

Every student, faculty, and staff member at the University must obtain an ID card from Panther Central, located in the Litchfield Towers main lobby. Student IDs, or "Panther Cards," are used to access residence halls (your assigned residence only), meal plan, athletic events, campus shuttle buses, recreational facilities (within your residence hall, Bellefield Hall, Trees Hall, and the Baierl Student Recreation Center), Student Health Services, computer labs, and Pitt Program Council events. The Panther Card also affords access to off-campus benefits such as free admission to some Pittsburgh cultural facilities. In addition, the Panther Card offers access to Panther Funds at local participating merchants. For all Panther Card information, stop in or call Panther Central at 412-648-1100 or visit www.pc.pitt.edu/card/index.html.

International Services

708 William Pitt Union
412-624-7120
www.ois.pitt.edu

The Office of International Services (OIS) advises international students on how to maintain their immigration status and helps to ensure compliance for both international visitors and the University, with respect to federal regulations. OIS also provides generalized support in connecting the University's international community and their hosting departments with resources inside and outside campus. For more information, contact OIS at ois@pitt.edu, or call 412-624-7120.

Parking and Transportation

The University provides a variety of parking and transportation services, both on and off campus. For more information, contact the University Department of Parking, Transportation, and Services at 412-624-8612 or visit www.pts.pitt.edu.

Parking Services

Student parking is available year-round. The Parking Services Office provides several parking options to meet the different schedules and needs of students. Commuter parking is available daily on a cash basis or by the term in selected facilities by permit only. Resident student permits are available for full-time students residing in one of the University residence halls operated through the Housing Office. Evening permits are available for parking after 2:50 p.m. weekdays and all day on weekends, except during special events, in many University lots. For more information, visit our Web site at www.pts.pitt.edu/parking. The Parking Services Office is located at 204 Brackenridge Hall, 412624-4034.

Commuting Alternatives (Ridesharing)

Daily commuter students can save money by sharing a ride. A free, computerized matching service is available to help you locate others interested in carpooling. Contact the University's ridesharing partner online at commuteinfo.org, or call 888-814-6110. For additional commuting alternatives, visit www.pts.pitt.edu/commuting.

Public Transportation

Students may ride any Port Authority bus, incline, or light-rail train within Allegheny County for free by showing their valid University ID cards. The Department of Parking, Transportation, and Services, at 3525 Forbes Ave., maintains all Port Authority rider information, including maps, schedules, and routes to facilitate the use of public transit. Port Authority bus schedules are also available in the lobby of the William Pitt Union.

Pittsburgh campus Transportation System

University of Pittsburgh students may ride all of the Pitt buses and shuttles fare-free by showing a valid University ID.

In addition, students are permitted two guest riders (space permitting). Buses and shuttles normally have a 20- or 30minute route. Detailed maps and time schedules are available online at www.pc.pitt.edu/transportation/index.html and at the William Pitt Union information desk. The Department of Parking, Transportation, and Services is located at 3525 Forbes Ave.

SafeRider

A night-time, non-emergency van service called SafeRider is available during the evening and early morning hours to transport you from one campus building to another, from local residences to campus buildings, and from campus buildings to local residences within the University boundaries, and it is not on a regular University bus route. SafeRider operates during the following hours:

Fall and Spring:
Sunday-Wednesday and days when the shuttle system operates on a holiday schedule
7 p.m.-3 a.m.

Thursday-Saturday
7 p.m.-5 a.m.

Summer:
Daily 9 p.m.-3 a.m.

For service, call the dispatcher at 412-648-CALL (2255) during these times. You will need to provide the following information when you call: your name, pick-up location and the telephone number at the pick-up location, destination, number of individuals with you, and student ID number. Consult the SafeRider brochure for additional information concerning policies and procedures.

Buses Home for the Holidays

This program is designed to give students a safe, comfortable, alternative ride home for the three major recesses: Thanksgiving, winter, and spring. Buses depart from the William Pitt Union, and most of the destinations served are direct routes. Deluxe motor coaches (Lenzer/Coach USA) transport the students in air-conditioned comfort while movies are shown en route.

Bicycle Registration Program

Registration of bicycles is recommended as a deterrent to theft, to help in the identification of lost or stolen bicycles, and to help better accommodate cyclists at the University. Registration is easy, and it is free. You may register bikes at www.pts.pitt.edu/commuting/bicycling/bike-registration.php.

Bicycle lockers are available at two convenient locations. The locker totally encloses the bicycle, protecting it from rain and snow. There is also room to store a helmet, riding shoes, and other accessories. Lockers may be rented by the term at the Parking Services Office in 204 Brackenridge Hall.

Career Development

The Career Development Office is dedicated to helping students prepare for rewarding careers by providing individual assistance and a variety of professional development programs. Career counselors and consultants assist students with choosing or changing an academic major through personal assessments, writing effective resumes and cover letters, networking with professionals, exploring internship opportunities, applying for graduate or professional school, and preparing for job interviews. Career Development has a variety of online resources that are available through the my.pitt.edu portal, including *FutureLinks*, a career management software program that enables students to apply for jobs and internships, as well as register for job fairs, career workshops, and other programs and events. Diverse educational programs are offered for students in all stages of their journey. For more information, call 412-648-7130, stop by 224 William Pitt Union, or see www.careers.pitt.edu.

Police Department

The University of Pittsburgh Police Department provides police and security services to the University community. For emergency calls, dial 811 from on-campus phones or 412-624-2121 from off-campus phones. The University of Pittsburgh Police Department's main headquarters is in G1N30 Wesley W. Posvar Hall. For general information calls (non-emergency), dial 412-624-4040 or see http://www.police.pitt.edu.

Student Government

Undergraduates at the University are represented by two primary governing bodies, the Student Government Board and the College of General Studies (CGS) Student Government Council.

The Student Government Board (SGB)

The Student Government Board (SGB) is an elected body of nine students that exists to promote the concerns, interests, needs, and welfare of non-College of General Studies undergraduates at the Pittsburgh campus of the University of Pittsburgh. As the governing body for students, SGB serves as the liaison to University faculty, administration, and staff. SGB also distributes student activity fee funds to student clubs and organizations.

SGB makes appointments to University committees and also oversees SGB committees, whose membership is open to all undergraduates. These SGB committees include Academic Affairs; Allocations; Communications; Community and Governmental Relations; Elections; Facilities, Technology, and Transportation; First Year Council; Judicial; Wellness; and any existing task force or ad-hoc committee. The SGB meets weekly during the fall and spring terms. For more information, call 412-648-7970, visit 848 William Pitt Union, or see www.sgb.pitt.edu.

The CGS Student Government Council

The CGS Student Government Council is composed of five elected members who represent the interests of students in the College of General Studies. The Council coordinates a variety of student programs and services and allocates the CGS student activity fee. In addition to the five members of the Council, there are five divisions that help carry out the Council's business: Budget and Finance, Judicial Affairs, First Degree, Marketing and Advertising, and Student Programs. For more information, call 412-648-7895, visit 824 William Pitt Union, or see www.cgssg.pitt.edu.

PITT Arts

Each year, 22,000 Pitt students experience the power of the visual and performing arts in Pittsburgh through the PITT ARTS program, which sponsors 110 free student outings per year, including trips to the symphony, cinema, opera, ballet, theater, and museums. Students may also use their student ID cards (Panther Card) to visit the Carnegie Museums of Art and Natural History, Phipps Conservatory and Botanical Gardens, and The Andy Warhol Museum at no cost. Visit the PITT ARTS Web site at www.pitt.edu/~pittarts to find a listing of current arts events in Pittsburgh and on campus, and explore the cheap seats page to find out about deeply discounted tickets, sold right in the William Pitt Union, to local arts organizations.

Pitt Program Council

A variety of entertainment and educational activities are planned each year by the student committees of the Pitt Program Council (PPC), the central programming organization on campus. Programs include lectures, travel packages, weekend films, miniseminars, recreational tournaments, annual homecoming activities, and art gallery exhibits. New members are always welcome. For more information, contact the Pitt Program Council at 412-648-7900, or visit www.pitt.edu/~ppc.

Student Employment and Placement Assistance

The mission of the Office of Student Employment and Placement Assistance (SEPA) is to connect Pitt students who are actively seeking jobs or internships with recruiters and human resources professionals at businesses and organizations throughout the country. SEPA staff work to build relationships with representatives in a variety of career fields and help match qualified students with companies. SEPA hosts several career fairs each semester, facilitates the on-campus interviewing process, and helps students to tap into the Pitt Career Network sponsored by the Pitt Alumni Association. Employers and students use the online career management software program *FutureLinks*, which is accessible on the my.pitt.edu portal, to make connections. For more information, call 412-648-HIRE (4473), stop by the office located at 200 William Pitt Union, or visit www.sepa.pitt.edu.

Student Media

Student-produced media creates original news and entertainment for students and provides training to students interested in working in the media.

The Pitt News publishes a daily newspaper in print, online, social media and mobile app and features news, sports, opinions, art and entertainment and videos.

WPTS-FM radio station broadcasts alternative and independent music, campus news and sports via the FM dial, webstreaming and mobile apps. Their website provides music articles, concert reviews, and news and sports reports.

UPTV-21 television station posts varied short comedic and dramatic video entertainment programs on YouTube and streams some programming live on its website.

Student Organizations

More than 500 registered student organizations provide myriad opportunities for extracurricular activity. In addition to government, media, publications, programming, fraternity, sorority, and honor societies, there are clubs for sports, recreation, performing arts, politics, religion, service, professional and academic pursuits, ethnic and cultural enrichment, and many other specialized interests. Students may also participate in organizations that represent the interest of specific student groups, such as the Black Action Society. A complete list of registered student organizations is available at www.sorc.pitt.edu. The Student Organization Resource Center (SORC) is the office that oversees registered student organizations and is located in 833 William Pitt Union.

Student Volunteer Outreach

The Student Volunteer Outreach (SVO) promotes, supports, and provides opportunities for students to participate in community service and service-learning activities ranging from one-time service projects and alternative break projects to internships and ongoing volunteer opportunities. It also sponsors annual projects and events, including the SVO/SGB Pittsburgh Project, Pitt Partnership for Food, and the Agency Fair for student volunteers. The SVO is on the ninth floor of the William Pitt Union; its Web site is www.svo.pitt.edu.

University Child Development Center

The University Child Development Center is a developmental child-care facility for children between the ages of 6 weeks and 5 years. The center is open to children of University students, faculty, and staff. The children are free to select activities from an age-appropriate environment prepared by the teaching staff. The environment allows children to practice previously learned skills and challenges children to develop new psychosocial, cognitive, and motor skills in a relaxed, nurturing atmosphere. The center is at 635 Clyde St. and is open from 7 a.m. to 6 p.m. Monday through Friday. For more information, call 412-383-2100 or see www.hr.pitt.edu/ucdc.

Veterans Services

The staff of the Office of Veterans Services facilitates the transition of veterans from military to University life, supports their ongoing academic success, and assists veterans, guardsmen, reservists, spouses, and dependents in receiving their military education benefits. In addition to these services, the office implements the VA work study program. The Office of Veterans Services is located on the first floor of Posvar Hall, inside of the College of General Studies. Please call 412-624-3213 or email veterans@pitt.edu for more information.

William Pitt Union

The William Pitt Union, built more than 100 years ago and located across Bigelow Boulevard from the Cathedral of Learning, serves as the focal point for campus activities, student organizations, and the Division of Student Affairs. The union features a recreation center, videogame center, dining service, information service, art gallery, dance studio, lounges, meeting rooms, student organization offices, ticket office, dining rooms, and several multi-use spaces for programs. To reach the union's information desk, call 412-648-7815.

Financial Information

Tuition

Enrollment Fee or Tuition Deposit

Upon acceptance to the University, students may be required to pay a nonrefundable, nontransferable enrollment fee or tuition deposit. If paying an enrollment fee, part of that fee will be considered to be a tuition deposit, and part might be used to pay for new student programming of some nature. The tuition deposit component will be applied toward their first-term tuition. The amount of the deposit varies, depending on your program of admission. Instructions for payment will be specified in the admission letter.

Full-time and Part-time Tuition and Mandatory Fees

This information can be found on the Tuition Rates and Mandatory Fees page.

Determining How Full-Time vs Part-Time Students are Billed

In the Fall and Spring Terms:

Undergraduate students registered for 12 to 18 credits in the Fall and Spring Terms are regarded as full-time students, and are assessed the current undergraduate "flat" tuition rate for their academic center.
Undergraduate students registered for fewer than 12 credits are considered part-time, and are billed on a per-credit basis.

Graduate students registered for 9 to 15 credits in the Fall and Spring Terms are regarded as full-time students, and are assessed the current graduate "flat" tuition rate for their academic center.

Graduate students registered for fewer than 9 credits are considered part-time, and billed on a per-credit basis.

Students will be charged per credit for each credit exceeding the maximum full-time credit limit.

In the Summer Term:

All students are billed on a per-credit basis in the Summer Term with the exception of students in the School of Dental Medicine Dental Hygiene Certificate Program; the Swanson School of Engineering undergraduate program; the Katz Graduate School of Business Full-time MBA, MBA/MS and EMBA Programs; and the School of Nursing Accelerated Nursing Program.

DETERMINING HOW UNDERGRADUATE VS. GRADUATE STUDENTS ARE BILLED

Students are billed at the undergraduate or graduate tuition level in accordance with University of Pittsburgh Tuition and Fees Policy 09-05-03.

- A student enrolled in an associate's or bachelor's degree program is considered an **undergraduate** student and is billed at the appropriate undergraduate tuition rate.
- A student who has already been awarded a bachelor's degree and is enrolled in a **graduate** or doctorate-professional practice program is considered a graduate student and is billed at the appropriate graduate tuition rate, even for undergraduate classes taken during the student's graduate career.
- A student who has already been awarded a bachelor's degree and is enrolled in an associate's program or in another bachelor's program is considered a **post-baccalaureate** student. Post-baccalaureate students enrolled in an undergraduate academic center are billed at the undergraduate tuition rate, while post-baccalaureate students enrolled in an academic center that has both undergraduate and graduate degree programs may be billed at either the undergraduate or graduate rate, according to the admitting school's program requirements.

About Mandatory Fees

Mandatory Fee figures are applicable to students regardless of Pennsylvania or Out-of-State residency. Not listed under Mandatory Fees are:

1. **Course/major fees** that are based upon registration in specific courses (e.g., lab fees).
2. **Academic fees** (e.g., application fees, academic program fees for programs such as Cooperative Engineering Program and Study Abroad).
3. **Service fees** (e.g., late application for graduation and lost ID cards).
4. **Professional workshop and professional development fees**
5. **Specific-student fees** such as the Freshman Socialization Fee at the Greensburg Campus.

Residency/Reduced Tuition

Admitted students who are United States citizens and have lived in Pennsylvania for a continuous period of 12 months before enrollment in any institution of higher education may be eligible for Pennsylvania tuition rates. Students who wish to challenge their residency classification may petition for Pennsylvania tuition rates by submitting convincing evidence for review to the Student Appeals Office in Thackeray Hall. The University's policy on Pennsylvania Residency Classification is located online at https://www.cfo.pitt.edu/policies/policy/09/09-05-04.html.

Military affiliated students and students who are not U.S. citizens may be eligible for Pennsylvania tuition rates if they meet the qualifications and provide the documentation required by University of Pittsburgh Policy 09-05-04, Pennsylvania Residency Classification.

For any student younger than 22, both the student and parent(s) or legal guardian(s) must meet the residency requirements to be eligible for reduced tuition.

Financial Obligation

Students establish a financial obligation to the University when they enroll in courses and will be asked to acknowledge that obligation to be permitted to enroll in classes each term. The agreement to pay (Promissory Note) the student electronically agrees to provides detailed information about the student's financial obligation and also the consequences of default of that obligation. Unpaid accounts may be referred to a collection agency, reported to credit bureau(s), and/or the student may be subject to legal action. In either case, the student will be responsible for any and all expenses incurred, including attorney fees. Students will bear the University's costs and fees associated with all collection activity resulting from the student's failure to make payment under the agreement they will sign each term.

Fees

Special Service Fees may be charged for University transactions that are processed beyond deadlines, due dates, and specified time limits. Special service fees are listed each term in the Schedule of Classes.

Course Fees are associated with certain courses and will be charged when the student enrolls in those courses. These courses are identified in the Schedule of Classes and Course Descriptions. Course fee information is also available on the Academic Regulations page.

Late Payment Fees are charged when students make payment after the published due date for their charges for the term.

Payments and Credit Balance Refunds

PittPAY is the University's online financial portal for students and the Authorized Users that students have designated as having access to their financial information.

Payments may be made in PittPAY by electronic check (eCheck) or by credit or debit card. While there is no charge for eCheck transactions, our vendor will charge a non-refundable 2.75% convenience fee for all debit or credit card payments. Check payments can be mailed to the address on the Remittance Form at the bottom of the Term Statement, which students and Authorized Users can generate and print themselves.

International Payments can be processed in PittPAY through the University's partnership with Flywire. Flywire offers a streamlined and cost effective way for students and Authorized Users to make international payments on the student account from almost any country, in most currencies.

PittPAY Payment Plans are available for those who elect to make payments in a series of monthly installments, instead of one payment by the due date. Participation in a payment plan is optional. To view available payment plan offers, go to the Payment Plans tab in PittPAY.

eRefunds are automatic refunds of credit balances from the student account. Credit balances occur when payments to the account, including the disbursement of loans and financial aid, exceed the amount you owe. Students and Authorized Users who are Parent PLUS loan borrowers, go to the eRefund tab in PittPAY to designate the checking or savings account where your credit balances should be directly deposited.

Tuition Rates and Mandatory Fees

Pennsylvania Resident Tuition Rates

School	Full-Time Per Academic Year	Full-Time Per Term	Part-Time Per Credit
Dietrich School of Arts and Sciences, College of General Studies, School of Education, and School of Social Work	$18,628	$9,314	$776
College of Business Administration	$20,806	$10,403	$866
Swanson School of Engineering	$20,662	$10,331	$860
School of Computing and Information	$20,456	$10,228	$852
School of Dental Medicine	$18,098	$9,049	$754
School of Nursing and School of Health and Rehabilitation Sciences	$23,452	$11,726	$977

Out-of-State Resident Tuition Rates

School	Full-Time Per Academic Year	Full-Time Per Term	Part-Time Per Credit
Dietrich School of Arts and Sciences, College of General Studies, School of Education, and School of Social Work	$32,656	$16,328	$1,360
College of Business Administration	$36,792	$18,396	$1,533
Swanson School of Engineering	$37,060	$18,530	$1,544
School of Computing and Information	$35,952	$17,976	$1,498
School of Dental Medicine	$32,498	$16,249	$1,354
School of Nursing and School of Health and Rehabilitation Sciences	$41,508	$20,754	$1,729

Mandatory Fees

Undergraduate

Fee	Full-Time Per Academic Year	Full-Time Per Term	Part-Time Per Term
Student Activity Fee	$160	$80	$24
Wellness Fee	$360	$180	$90
Computing and Network Services Fee	$350	$175	$100
Security, Safety, and Transportation Fee	$180	$90	$90
International Services Fee	*	*	*
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TOTAL	$1,050	$525	$304

*The International Services Fee is charged to all full-time, international undergraduate students enrolled at the Pittsburgh Campus. For Academic Year 2021, freshmen, sophomores, and juniors are charged $1,000 per year. Seniors are charged $500 per year. Note: The mandatory fees exhibited are applicable to Fall Term 2020 and are subject to change in subsequent terms of Academic Year 2020-2021

Due Date Schedule

Notifications and Due Dates

Weekly Balance Due Notifications are sent by email and text to students and their Authorized Users from pittpay@pitt.edu when there is a balance due on the student account. To view and edit your email and mobile phone number settings for these notifications, login to PittPAY, select Actions, then Manage Notifications.

Please note, due dates provided here are for planning purposes. The due dates for future terms are estimates, and are subject to change. When balance due notifications begin for each new term, the official due date will be presented in PittPAY on the Account Summary and Account Activity tabs. The current due date is always provided on the Student Payment Center's homepage, as well.

Term	Periodic Balance Due Notifications Begin:	Balance is Due:
Summer 2020	April 22, 2020 May 20, 2020	May 20, 2020 June 17, 2020
Fall 2020	July 22, 2020	September 16, 2020
Spring 2021	November 18, 2020	January 27, 2021

As soon as you make an online payment in PittPAY, your balance due will be updated to reflect the payment. You can view your payment receipt in Transaction History. Late fees, collection costs, and financial holds are placed on past due accounts.

College of Business Administration

The College of Business Administration (Pitt Business) is the undergraduate division of the Joseph M. Katz Graduate School of Business and awards the Bachelor of Science in Business Administration (BSBA) degree. Detailed information about the College of Business Administration is available at our website: http://www.cba.pitt.edu/about/. Pitt Business offers full-time and part-time programs with majors in accounting, business information systems, finance, global management, human resources management, marketing, and supply chain management. Double-degree programs are also available to BSBA students in conjunction with the Dietrich School of Arts and Sciences, School of Information Sciences (SIS) and the College of General Studies. Pitt Business also offers certificate programs in international business, leadership and ethics, supply chain management, innovation and entrepreneurship and business analytics for students in the BSBA degree program.

Additional degree programs include the arts and sciences/business dual major program offered through the Dietrich School of Arts and Sciences in conjunction with Pitt Business, and a post-baccalaureate career development certificate program in accounting available through the College of General Studies. Pitt Business draws its faculty from the Katz School and is accredited by AACSB International-The Association to Advance Collegiate Schools of Business.

Contact Information

University of Pittsburgh
College of Business Administration
Office of Admissions
2100 Sennott Square
Pittsburgh, PA 15260
412-383-9600
admissions@business.pitt.edu
www.cba.pitt.edu

Application Procedures

First-time freshman and external transfer admissions to Pitt Business are handled through the Office of Admissions and Financial Aid. Students planning to relocate to Pitt Business from another Pitt academic program or campus should contact the program in which they are currently enrolled to have their records forwarded to Pitt Business for evaluation. Details for freshman and transfer admissions, as well as for relocation, are provided in the Application for Admission section of this catalog.

Special Admissions

Under certain circumstances, second-degree, post-baccalaureate, and guest students may apply directly to the College of Business Administration for admission. Students applying under one of these statuses are considered for admission based on the strength of their academic records. (See Second Degree Candidates and Special and Nondegree Admissions sections of this catalog for more information.) Contact the Pitt Business Office of Admissions for specifics on admission requirements and other procedures.

Evaluation of Transfer Credits

Students transferring from other colleges or universities are encouraged to apply to the College of Business Administration through the Office of Admissions and Financial Aid. (See Transfer Student Admissions section of this catalog for detailed information.) Upon admission to Pitt Business, transfer students will receive a BSBA degree requirements checklist by email. Pitt Business will evaluate coursework from other colleges based on content and equivalency to coursework offered at the University of Pittsburgh. The degree checklist shows how the transferred courses will apply to the student's BSBA degree. To transfer, a course must be completed with a grade of C or better. The University does not accept grades for transfer, only credits. A minimum of 40 credits must be completed at the University of Pittsburgh. Students who have questions about their credit evaluation should contact the Pitt Business Office of Admissions. Please see our website for additional details on transfer credits: http://www.cba.pitt.edu/admissions/transfer/credit-policies

Academic Standards

The following section details the school's academic standards:

Academic Standing Policy

The academic standing of all BSBA students is reviewed at the end of the fall and spring terms. As a result of this review, students are assigned one of the following academic standing codes: good academic standing, academic probation, academic suspension, or academic dismissal.

Good Academic Standing

Students remain in good standing as long as they maintain a cumulative grade point average (GPA) of 2.00 in all courses taken at the University of Pittsburgh.

The cumulative GPA includes all courses taken on a Letter Grade grading basis at all campuses of the University of Pittsburgh. The course repeat rules require the most recent grade of a repeated course be included in the GPA.

Academic Probation

Any student who has a cumulative GPA below 2.00 is placed on academic probation.

Academic Suspension

Full-time students

If after one term of additional enrollment, the cumulative GPA of a full-time student on probation remains below 2.00, the student is subject to suspension or dismissal.

Students on probation

Students on probation who enroll and then withdraw from all courses are still subject to suspension because they have not raised their cumulative GPA to 2.00 after an additional term of attempted enrollment.

Part-time students

If, after attempting 12 additional credits, the cumulative GPA of a part-time student on probation remains below 2.00, the student is subject to suspension or dismissal.

An academic suspension from Pitt Business prohibits students from enrolling in courses at the University of Pittsburgh for one calendar year. Students will not be awarded transfer credit for courses taken at other colleges or universities while on academic suspension.

Reinstatement after the First Suspension

After one calendar year, suspended students are eligible to apply for reinstatement to the College of Business Administration by writing to the Pitt Business Associate Dean presenting a rationale for reinstatement.

Reinstated students return on academic probation and have one term of enrollment to raise their cumulative GPA to 2.0 or be subject to a second suspension or dismissal.

Second Academic Suspension

If suspended a second time, a student is not eligible for reinstatement for five years. After five years, suspended students are eligible to apply for reinstatement to the College of Business Administration by writing to the Pitt Business Associate Dean presenting a rationale for reinstatement.

Academic Dismissal

Dismissal from Pitt Business is a permanent action, and dismissed students are not eligible for reinstatement at any University of Pittsburgh school or campus.

Grade Point Average Standards

Overall GPA

A cumulative grade point average (GPA) of 2.00 is required in all courses applied toward the BSBA degree.

Major GPA

A minimum cumulative GPA of 2.25 (C+ average) is required in all courses applied toward a student's major. A C- or better must be earned in each individual course applied toward a student's major.

For full-time students: If a full-time student's major GPA drops below 2.25 for two consecutive terms, no new major courses may be taken until the major GPA is raised to 2.25 through course repeats.

For part-time students: If a part-time student's major GPA drops below 2.25 for 9 consecutive credits in his/her major, no new major courses may be taken until the major GPA is raised to 2.25 through course repeats.

Satisfactory/No-Credit Grade Option Policy

All required BSBA core courses and all courses to be applied to a student's major must be taken on a letter grade basis. In addition, courses taken to fulfill the requirements in microeconomics, macroeconomics, calculus, and statistics must also be taken on a letter grade basis. Language classes, arts and sciences general education courses, and electives may be taken on a satisfactory/no-credit (S/NC) grade basis.

Under the satisfactory/no-credit option, a student who does satisfactory work (C or better) receives the grade of S for the course and earns credit for the course. If a student does unsatisfactory work (defined as C- or lower), the student receives the grade of NC and does not earn credit for the course. These courses are not calculated as part of the GPA.

Students may select the S/NC grade option when enrolling online or by visiting 140 Thackeray Hall and completing the grade option form prior to the appropriate deadline.

Course Repeat Policy

A Pitt Business student may repeat a required Arts & Sciences course (including calculus, statistics, microeconomics, macroeconomics and composition), a business core requirement and/or a business major requirement once. If the minimal acceptable grade is not earned after repeating the course, the student may have to transfer out of Pitt Business, or select a different business major.
In the calculation of the major and overall grade point averages, the grade earned in the second taking of a course replaces the grade earned in the first taking; however, the grade earned in the first taking of the course, remains on the student's transcript with a notation indicating the course was repeated.

Academic Integrity

All Pitt Business students are responsible for adhering to Pitt Business policies on academic integrity. The Pitt Business academic integrity guidelines follow the University's guidelines with some procedural changes. Please see the guidelines for details.

Advising

Students pursuing the BSBA degree receive academic advising from full-time professional academic advisors in the College of Business Administration. Each new BSBA student is assigned an academic advisor, establishing a relationship that usually continues through graduation unless the student requests an advisor assignment change.

Academic advisors are information resources. Advisors meet with BSBA students at least once during the fall and spring academic terms to help students create customized academic and career individual development plans and prepare for course enrollment. BSBA students are required to meet with their academic advisor at least once per term, prior to enrollment.

BSBA students are responsible for their academic and career development choices and decisions, but Pitt Business academic advisors are an integrative information and planning resource for students.

BSBA Learning Goals

Graduates of the University of Pittsburgh's College of Business Administration should achieve the following learning outcomes in the four broad components of the BSBA program (major, electives, core and foundations courses):

Demonstrate in-depth knowledge and skills in at least one academic/career focus through completion of majors, certificates, minors and electives.

Demonstrate business management literacy.

Demonstrate competency in the fundamentals of analyzing problems and making decisions with standard business data and data sources using appropriate quantitative and qualitative methodologies.

Demonstrate competency in professional communication and leadership.

Demonstrate competency in applying acquired knowledge and skills in real-world situations.

Acquire a basic knowledge of at least one nation, region or culture in areas such as language, history, political systems, literature and artistic expression.

Acquire an exposure to the knowledge and methodologies used to explore natural, individual, social and cultural phenomena.

Major and Degree Options

The College of Business Administration offers the following degree options:

BSBA Degree

The College of Business Administration awards the Bachelor of Science in Business Administration (BSBA) degree and offers majors in accounting, business information systems, finance, global management, human resources management, marketing and supply chain management.

Pitt Business Certificate Programs

BSBA students have the opportunity to specialize their studies in business analytics, innovation and entrepreneurship, international business, leadership and ethics, supply chain management, innovation and entrepreneurship and business analytics through certificate programs.

The Certificate Program in Business Analytics (CPBA) is designed to give students a strong foundation in the theory, processes, and tools of business analytics in the organizational setting. The CPBA will help students to understand both the statistical and managerial sides of business analytics so that students can add value to organizations of all sizes and types.

The Certificate Program in Innovation and Entrepreneurship (CPIE) is a unique opportunity for Pitt Business students who wish to explore the interface between innovation and entrepreneurship as an enhancement to their business major. The CPIE will contribute to a student's preparation for an entrepreneurial endeavor or a career within an organization committed to innovation and entrepreneurial thinking.

The Certificate Program in International Business (CPIB) builds upon the core curriculum in the College of Business Administration. Requirements include satisfactory completion of level 4 of a second language (a two-year, four-course sequence at the University of Pittsburgh), specialized course work, and one term of approved study abroad or an international internship. Students majoring in Global Management may not also earn the Certificate in International Business. (15 credits, plus foreign language study, and international experience).

The Certificate Program in Leadership and Ethics (CPLE) builds upon the core curriculum in the College of Business Administration. Students admitted to the CPLE will be required to successfully complete all requirements for the BSBA degree requirements including satisfactory completion of specialized course work, internships, and a service-learning project integrating ethics and leadership. (16 credits)

The Certificate in Supply Chain Management (CSCM) is offered jointly by the College of Business Administration and Swanson School of Engineering. Enrollment is available to BSBA students and students enrolled in the BS engineering programs in the School of Engineering. The CSCM provides students with the opportunity to understand important concepts in supply chain management and develop managerial and technical skills which are highly valued in today's corporate environment. The program also offers an international travel experience for students to gain hands-on exposure to global supply chain organizations. The CSCM requires 15 credits and is comprised of coursework offered by both CBA and the School of Engineering.

The Certificate Program in Innovation and Entrepreneurship (CPIE) builds upon the core curriculum in the College of Business Administration. CPIE students will explore the interface between innovation and entrepreneurship as an enhancement to their business major. The CPIE will contribute to a student's preparation for an entrepreneurial endeavor or a career within an organization committed to innovation and entrepreneurial thinking. (15 credits)

The Certificate Program in Business Analytics (CPBA) builds upon the core curriculum in the College of Business Administration. CPBA students will develop a comprehensive understanding of business analytics. Students will learn how to diagnose problems and envision solutions from an evidence-based perspective. They will develop the capability to build statistical models, measure the data, interpret the results, and then synthesize the findings in order to improve organizational performance. This holistic education will teach students both the statistical and managerial sides of business analytics. (15 credits)

Pitt Business/A&S Double Degree

Pitt Business offers the double degree program for students seeking to earn degrees in both business and the arts and sciences. Students earning degrees from both Pitt Business and A&S complete a 150-credit program of study, generally requiring five years of study. Students considering this option should consult with advisors in both Pitt Business and A&S, as well as a representative from Career Services, to determine how this program will advance their academic and career goals.

Pitt Business/SIS Double Degree

Pitt Business offers a double degree program for BSBA students seeking to earn degrees in both business and information sciences. Students earning degrees from both Pitt Business and SIS complete a 150-credit program of study, generally requiring five years of study. Students considering this option should consult with advisors in both Pitt Business and SIS, as well as a representative from Career Services, to determine how this program will advance their academic and career goals.

Special Academic Opportunities/Programs

The College of Business Administration offers the following special programs:

Internship Programs

Internships and other career development experiences are an absolutely essential part of business education. The Office of Career Development team works closely with business students to prepare them to successfully launch their careers. A wide range of services, including individualized resume development reviews, mock interviews and career coaching are provided by the Career Development team. The Career Development team also works closely with a wide network of employers and alumni to help business students find internships, as well as full-time positions upon graduation.

Additionally, an international internship program is available to qualified Pitt Business students. This six-credit global immersion program provides a valuable professional experience for students to develop their functional skills, gain a better understanding of cultural differences in the workplace, and enhance their language skills. Sites include: Berlin, Germany; San Paulo, Brazil; Dublin, Ireland; Beijing, China; and Madrid, Spain.

Study Abroad

The Pitt Business International Programs Office connects students to opportunities in more than 75 countries, and the insights Pitt Business students gain into other cultures and economies through these experiences abroad helps them stand out in the competitive global marketplace. Each program is designed to promote cultural development and adheres to our standard of academic excellence. For additional details, please visit our website at: http://www.cba.pitt.edu/study_abroad.

Student Organizations

Business students must diversify their experiences at Pitt and develop hands-on leadership skills essential to a career in business. Pitt Business student organizations are a good way to do this. Designed to run like small businesses, the organizations put students in control. We count on members to coordinate speaker visits from the corporate community, to arrange site visits to local offices of financial institutions and accounting firms, to sponsor social activities for members, and much more. As a member of a student organization, you will make friends for life and develop skills that enhance your resume for your first job. For additional details, please visit our website at: http://www.cba.pitt.edu/studentlife/organizations.

BSBA Degree Program Descriptions

BSBA students may choose a major in accounting, finance, general management, global management, or marketing. To earn the BSBA degree in any of these majors, students must complete a minimum of 120 credits, fulfill all arts and sciences foundation requirements, complete all BSBA core curriculum requirements, and fulfill any major-specific requirements as detailed below.

Certificate

Sports Management Certificate

A total of 18 credits is needed to complete the CPSM certificate. This includes a 6-credit required core, plus 9 credits of elective courses and a 3-credit required experience-based learning component course, a sport or sports-related internship, or a global sports or sports-related experience. Students are strongly encouraged to participate in related non-credit sports or sports-related immersion experiences such as competitions, workshops sponsored by local sports-based organizations (e.g. WISE workshops) or activities sponsored by sports or sports-related organizations (e.g. Pirates Charities or Pitt Athletics events). The courses outlined have been selected to build a solid business foundation while permitting students an in-depth analysis of a chosen major field complemented by a personal interest in sports.

Required Courses (6 credits)

The following courses are required:

- BUSHRM 1050 - HUMAN RESOURCES MANAGEMENT
- BUSHRM 1689 - SPORTS MANAGEMENT

Elective Courses (9 credits)

Select three (3) from the following (elective choices can correspond to elective choices within the student's major).

- BUSHRM 1675 - HUMAN RESOURCES STAFFING
- BUSHRM 1688 - HUMAN RESOURCE ANALYTICS
- BUSENV 1760 - BUSINESS LAW
- BUSORG 1660 - MANAGING DIVERSTIY IN ORGANIZATIONS
- BUSMKT 1428 - DIGITAL AND SOCIAL MEDIA MARKETING
- BUSMKT 1470 - SPORTS MARKETING
- BUSBIS 1625 - ELECTRONIC COMMERCE
- BUSFIN 1321 - INVESTMENT MANAGEMENT
- BUSSCM 1750 - REVENUE MANAGEMENT
- BUSSCM 1760 - DATA MINING

Experiential Learning Requirement (3 credits)

Select one of the following.

- BUSHRM 1686 - SPORTS MANAGEMENT PROJECT COURSE
- BUSHRM 1690 - HUMAN RESOURCES MANGEMENT INTERNSHIP

Department of Business Administration

Major

Accounting, BSBA

Program Requirements.

BSBA Degree Requirements

The following sections describe the general requirements for all majors within the Bachelor of Science in Business Administration (BSBA) degree program:

The degree requirements applicable to a particular student are based upon the student's term of entry into the program and reflect any requirement changes that have been approved since this bulletin was published. These requirements and the student's progress toward the BSBA degree are noted on the student's online Undergraduate Advisement Transcript.

Graduation Requirements

One-hundred twenty credits are required for graduation with a BSBA degree. A minimum of 51 credits must be taken in the arts and sciences.

A student may use one course to fulfill two arts and sciences requirements.

Arts and Sciences Foundations: Basic Skills Requirements

There are seven basic skills that all BSBA students must master; these basic skills prepare students for future classes. The basic skills requirements include:

English Composition

- Students who earn 500 or above on SAT Verbal (Critical Reading) are placed into Seminar in Composition (or equivalent course).
- Students who earn below 500 on SAT Verbal (Critical Reading) will be placed into a Workshop in Composition course.
- Recommendations for ENGCMP 0201 or ENGCMP 0151 (tutorials) will be based on class diagnostic writing during add/drop period.
- English as a Second Language students will be placed into appropriate courses based on English Language proficiency.

All students are strongly encouraged to complete their English composition requirement(s) in the freshman year.

Students earning a score of 600 on the critical reading portion of the SAT, who also earn a score of 5 on the Advanced Placement (AP) English exam, will be awarded advanced standing credit for ENGCMP 0200 - SEMINAR IN COMPOSITION and 3 additional credits in English composition.

Second Language

Any one of the following fulfills the language requirement:

- Three years of study of a single second language in high school, passed with an average of C or better over the three years.
- Placement into level III of a second language on a University of Pittsburgh language placement test.
- Placement into level II of a second language on a University of Pittsburgh language placement test and completion of the appropriate course from the second course list below.
- Completion of an approved two course sequence of a foreign language.

Students should discuss specific foreign language course options with their academic advisor.

Calculus

Taking one course from the following list fulfills this requirement:
Note: *Only one of these courses may apply to the 120 total credits required for graduation.*

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

or both
- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

Statistics

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT fulfills this requirement.

Economics

Both of the following courses must be taken to fulfill this requirement:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Arts and Sciences General Education Electives

In addition to fulfilling the basic skills requirements, students further supplement their business curriculum by taking courses from six general education categories including:

- Literature (one course)
- Music/art (one course)
- Philosophy (one course)
- Social sciences (two courses, each from a different discipline)
- Natural sciences (two courses)
- Foreign culture (two courses or participation in an approved study abroad program)

Note: *All students, including international students and U.S. citizens who have lived abroad for any length of time, must complete the foreign culture requirement.*

Contact the school for a complete listing of approved courses that meet these elective requirements.

Business Core Curriculum

The Business Core Curriculum:

The following courses (36 credits) are required of all CBA students:

- BUSSPP 0020 - MANAGING COMPLEX ENVIRONMENTS
- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING
- BUSQOM 0050 - QUANTITATIVE METHODS
- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSORG 1101 - FUNDAMENTALS OF BUSINESS COMMUNICTION (prerequisite 30 credits)
- BUSFIN 1030 - INTRODUCTION TO FINANCE (prerequisite 30 credits)
- BUSMKT 1040 - INTRODUCTION TO MARKETING (prerequisite 30 credits)
- BUSECN 1010 - MANAGERIAL ECONOMICS (prerequisite 30 credits)
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Other Business Requirements

CBA students must also satisfy one of the following requirements:

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS This one-credit course is required of all first-time CBA freshmen. In the course, new BSBA students will explore the majors offered in CBA, investigate global opportunities, develop networking and professional skills, create a resume, and learn how to connect with CBA's Career Services team regarding events, internship opportunities, and career development.

BUS 0020 - YOUR CAREER SUCCESS This one-credit course is required of all new CBA transfer students. In the course, students will participate in career exploration, develop and implement a personal strategy for career goal setting and planning, learn and practice communication and other professional skills, and become familiar with the internship and job search processes.

Requirements

The major in accounting is designed to provide students with the general, business, and accounting knowledge necessary for them to succeed as professional accountants. As accounting is a dynamic field, all accounting majors will learn how to keep their knowledge up to date so they can continue to grow throughout their professional careers. Accounting majors will acquire the communication, computer, and interpersonal skills necessary to successfully resolve complex problems in unstructured settings. Accounting majors benefit from participation in extracurricular activities and organizations such as the University of Pittsburgh Accounting Association and Beta Alpha Psi, the national accounting honorary society.

All accounting majors must complete the two (2) BSBA core courses in accounting as well as the seven (7)required accounting major courses listed below. All courses are three credits unless noted otherwise.

BSBA Core Courses in Accounting

Students must complete these courses with a C or better in each course to be eligible to take additional accounting courses:

- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING

Required Accounting Major Courses (22 credits)

Courses are offered on a rotating basis.

- BUSACC 1204 - INTERMEDIATE FINANCIAL REPORTING 1
- BUSACC 1205 - INTERMEDIATE FINANCIAL REPORTING 2
- BUSACC 1216 - ADVANCED FINANCIAL ACCOUNTING
- BUSACC 1221 - STRATEGIC COST MANAGEMENT
- BUSACC 1236 - ACCOUNTING INFORMATION SYSTEMS
- BUSACC 1238 - AUDITING
- BUSACC 1242 - INDIVIDUAL TAX ACCOUNTING AND PLANNING

Accounting Electives

- BUSACC 1210 - FINANCIAL STATEMENT ANALYSIS
- BUSACC 1296 - ACCOUNTING INTERNSHIP (requires CBA approval)
- BUSACC 1298 - ACCOUNTING INDEPENDENT STUDY (requires CBA approval)

BSBA Program Learning Goals

Graduates of the University of Pittsburgh's College of Business Administration should achieve the following learning outcomes in the four broad components of the BSBA program (major, electives, core and foundations):

Demonstrate in-depth knowledge and skills in at least one academic/career focus through completion of majors, certificates, minors and electives.

Demonstrate what every BSBA graduate is expected to know about business and management at graduation. This literacy is developed in courses taught in CBA and in particular courses required of all students and offered by the School of Arts and Sciences.

Demonstrate competency in the fundamentals of analyzing problems and making decisions with standard business data and data sources using appropriate quantitative and qualitative methodologies.

Demonstrate competency in interpersonal skills, including concise and persuasive written and presentation communication.

Demonstrate competency in applying acquired knowledge and skills in real-world situations.

Acquire a basic knowledge of at least one nation, region or culture in areas such as language, history, political systems, literature and artistic expression.

Acquire an exposure to the knowledge and methodologies used to explore natural, individual, social and cultural phenomena.

Students preparing for the Certified Public Accounting (CPA) Exam will need to complete 150 total credit hours. These credits may be completed through the BSBA program and/or through the MS in Accounting program. Particular CPA Exam requirements vary by state. Academic Advisors and members of the Accounting faculty provide guidance to students preparing for the CPA exam, but students are responsible for confirming with the appropriate state board of accountancy that all educational and experiential requirements are met.

Finance, BSBA

BSBA Degree Requirements

The following sections describe the general requirements for all majors within the Bachelor of Science in Business Administration (BSBA) degree program:

The degree requirements applicable to a particular student are based upon the student's term of entry into the program and reflect any requirement changes that have been approved since this bulletin was published. These requirements and the student's progress toward the BSBA degree are noted on the student's online Undergraduate Advisement Transcript.

Graduation Requirements

One-hundred twenty credits are required for graduation with a BSBA degree. A minimum of 51 credits must be taken in the arts and sciences.

A student may use one course to fulfill two arts and sciences requirements.

Arts and Sciences Foundations: Basic Skills Requirements

There are seven basic skills that all BSBA students must master; these basic skills prepare students for future classes. The basic skills requirements include:

English Composition

- Students who earn 500 or above on SAT Verbal (Critical Reading) are placed into Seminar in Composition (or equivalent course).
- Students who earn below 500 on SAT Verbal (Critical Reading) will be placed into a Workshop in Composition course.
- Recommendations for ENGCMP 0201 or ENGCMP 0151 (tutorials) will be based on class diagnostic writing during add/drop period.
- English as a Second Language students will be placed into appropriate courses based on English Language proficiency.

All students are strongly encouraged to complete their English composition requirement(s) in the freshman year.

Students earning a score of 600 on the critical reading portion of the SAT, who also earn a score of 5 on the Advanced Placement (AP) English exam, will be awarded advanced standing credit for ENGCMP 0200 - SEMINAR IN COMPOSITION and 3 additional credits in English composition.

Second Language

Any one of the following fulfills the language requirement:

- Three years of study of a single second language in high school, passed with an average of C or better over the three years.
- Placement into level III of a second language on a University of Pittsburgh language placement test.
- Placement into level II of a second language on a University of Pittsburgh language placement test and completion of the appropriate course from the second course list below.
- Completion of an approved two course sequence of a foreign language.

Students should discuss specific foreign language course options with their academic advisor.

Calculus

Taking one course from the following list fulfills this requirement:
Note: *Only one of these courses may apply to the 120 total credits required for graduation.*

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
  or both
- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

Statistics

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT fulfills this requirement.

Economics

Both of the following courses must be taken to fulfill this requirement:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Arts and Sciences General Education Electives

In addition to fulfilling the basic skills requirements, students further supplement their business curriculum by taking courses from six general education categories including:

- Literature (one course)
- Music/art (one course)
- Philosophy (one course)
- Social sciences (two courses, each from a different discipline)
- Natural sciences (two courses)
- Foreign culture (two courses or participation in an approved study abroad program)

Note: *All students, including international students and U.S. citizens who have lived abroad for any length of time, must complete the foreign culture requirement.*

Contact the school for a complete listing of approved courses that meet these elective requirements.

Business Core Curriculum

The Business Core Curriculum:

The following courses (36 credits) are required of all CBA students:

- BUSSPP 0020 - MANAGING COMPLEX ENVIRONMENTS
- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING
- BUSQOM 0050 - QUANTITATIVE METHODS
- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSORG 1101 - FUNDAMENTALS OF BUSINESS COMMUNICTION (prerequisite 30 credits)
- BUSFIN 1030 - INTRODUCTION TO FINANCE (prerequisite 30 credits)
- BUSMKT 1040 - INTRODUCTION TO MARKETING (prerequisite 30 credits)
- BUSECN 1010 - MANAGERIAL ECONOMICS (prerequisite 30 credits)
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Other Business Requirements

CBA students must also satisfy one of the following requirements:

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS This one-credit course is required of all first-time CBA freshmen. In the course, new BSBA students will explore the majors offered in CBA, investigate global opportunities, develop networking and professional skills, create a resume, and learn how to connect with CBA's Career Services team regarding events, internship opportunities, and career development.

BUS 0020 - YOUR CAREER SUCCESS This one-credit course is required of all new CBA transfer students. In the course, students will participate in career exploration, develop and implement a personal strategy for career goal setting and planning, learn and practice communication and other professional skills, and become familiar with the internship and job search processes.

Requirements

The major in finance is designed to provide students with the financial knowledge and skills required for a successful business career. It attempts to give students a thorough understanding of the theoretical financial principles and the practical implementation of these principles in the world of business. Students learn how financial markets operate and how to make effective investment and financial decisions. The major is designed to develop analytical skills and problem-solving abilities.

Finance knowledge and practice have become crucial for the success of corporations and of the individuals employed by them. Financial markets are the major conduits through which investments are channeled in the global marketplace.

Understanding these markets and how to make investment decisions are crucial for success in business.

In addition to the BSBA core course, BUSFIN 1030 - INTRODUCTION TO FINANCE, at least fifteen (15) credits in finance course work are required for the finance major.

BSBA Core Course in Finance

This course must be completed with a C or better to take additional finance courses:

- BUSFIN 1030 - INTRODUCTION TO FINANCE

Required Finance Major Courses

- BUSFIN 1311 - CORPORATE FINANCE
- BUSFIN 1321 - INVESTMENT MANAGEMENT

Finance Electives

Courses are offered on a rotating basis.
(A minimum of three courses must be taken.)

- BUSFIN 1316 - ADVANCED CORPORATE FINANCE
- BUSFIN 1326 - EFFICIENCY OF CAPITAL MARKETS
- BUSFIN 1327 - RISK MANAGEMENT
- BUSFIN 1328 - CAPITAL MARKETS
- BUSFIN 1331 - FINANCIAL INSTITUTIONS AND MARKETS
- BUSFIN 1341 - INTERNATIONAL FINANCE
- BUSFIN 1345 - MARKETS AND TRADING
- BUSFIN 1347 - MERGERS, ACQUISITIONS AND CORPORATE STRUCTURES
- BUSFIN 1351 - FINANCIAL MODELING
- BUSFIN 1354 - Valuation
- BUSFIN 1390 - FINANCE INTERNSHIP
- BUSFIN 1395 - FINANCE INDEPENDENT STUDY

BSBA Program Learning Goals

Graduates of the University of Pittsburgh's College of Business Administration should achieve the following learning outcomes in the four broad components of the BSBA program (major, electives, core and foundations):

Demonstrate in-depth knowledge and skills in at least one academic/career focus through completion of majors, certificates, minors and electives.

Demonstrate what every BSBA graduate is expected to know about business and management at graduation. This literacy is developed in courses taught in CBA and in particular courses required of all students and offered by the School of Arts and Sciences.

Demonstrate competency in the fundamentals of analyzing problems and making decisions with standard business data and data sources using appropriate quantitative and qualitative methodologies.

Demonstrate competency in interpersonal skills, including concise and persuasive written and presentation communication.

Demonstrate competency in applying acquired knowledge and skills in real-world situations.

Acquire a basic knowledge of at least one nation, region or culture in areas such as language, history, political systems, literature and artistic expression.

Acquire an exposure to the knowledge and methodologies used to explore natural, individual, social and cultural phenomena.

General Management, BSBA

BSBA Degree Requirements

The following sections describe the general requirements for all majors within the Bachelor of Science in Business Administration (BSBA) degree program:

The degree requirements applicable to a particular student are based upon the student's term of entry into the program and reflect any requirement changes that have been approved since this bulletin was published. These requirements and the student's progress toward the BSBA degree are noted on the student's online Undergraduate Advisement Transcript.

Graduation Requirements

One-hundred twenty credits are required for graduation with a BSBA degree. A minimum of 51 credits must be taken in the arts and sciences.

A student may use one course to fulfill two arts and sciences requirements.

Arts and Sciences Foundations: Basic Skills Requirements

There are seven basic skills that all BSBA students must master; these basic skills prepare students for future classes. The basic skills requirements include:

English Composition

- Students who earn 500 or above on SAT Verbal (Critical Reading) are placed into Seminar in Composition (or equivalent course).
- Students who earn below 500 on SAT Verbal (Critical Reading) will be placed into a Workshop in Composition course.
- Recommendations for ENGCMP 0201 or ENGCMP 0151 (tutorials) will be based on class diagnostic writing during add/drop period.
- English as a Second Language students will be placed into appropriate courses based on English Language proficiency.

All students are strongly encouraged to complete their English composition requirement(s) in the freshman year.

Students earning a score of 600 on the critical reading portion of the SAT, who also earn a score of 5 on the Advanced Placement (AP) English exam, will be awarded advanced standing credit for ENGCMP 0200 - SEMINAR IN COMPOSITION and 3 additional credits in English composition.

Second Language

Any one of the following fulfills the language requirement:

- Three years of study of a single second language in high school, passed with an average of C or better over the three years.
- Placement into level III of a second language on a University of Pittsburgh language placement test.
- Placement into level II of a second language on a University of Pittsburgh language placement test and completion of the appropriate course from the second course list below.

- Completion of an approved two course sequence of a foreign language.

Students should discuss specific foreign language course options with their academic advisor.

Calculus

Taking one course from the following list fulfills this requirement:
Note: *Only one of these courses may apply to the 120 total credits required for graduation.*

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
  or both
- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

Statistics

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT fulfills this requirement.

Economics

Both of the following courses must be taken to fulfill this requirement:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Arts and Sciences General Education Electives

In addition to fulfilling the basic skills requirements, students further supplement their business curriculum by taking courses from six general education categories including:

- Literature (one course)
- Music/art (one course)
- Philosophy (one course)
- Social sciences (two courses, each from a different discipline)
- Natural sciences (two courses)
- Foreign culture (two courses or participation in an approved study abroad program)

Note: *All students, including international students and U.S. citizens who have lived abroad for any length of time, must complete the foreign culture requirement.*

Contact the school for a complete listing of approved courses that meet these elective requirements.

Business Core Curriculum

The Business Core Curriculum:

The following courses (36 credits) are required of all CBA students:

- BUSSPP 0020 - MANAGING COMPLEX ENVIRONMENTS
- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING
- BUSQOM 0050 - QUANTITATIVE METHODS
- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSORG 1101 - FUNDAMENTALS OF BUSINESS COMMUNICTION (prerequisite 30 credits)
- BUSFIN 1030 - INTRODUCTION TO FINANCE (prerequisite 30 credits)
- BUSMKT 1040 - INTRODUCTION TO MARKETING (prerequisite 30 credits)

- BUSECN 1010 - MANAGERIAL ECONOMICS (prerequisite 30 credits)
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Other Business Requirements

CBA students must also satisfy one of the following requirements:

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS This one-credit course is required of all first-time CBA freshmen. In the course, new BSBA students will explore the majors offered in CBA, investigate global opportunities, develop networking and professional skills, create a resume, and learn how to connect with CBA's Career Services team regarding events, internship opportunities, and career development.

BUS 0020 - YOUR CAREER SUCCESS This one-credit course is required of all new CBA transfer students. In the course, students will participate in career exploration, develop and implement a personal strategy for career goal setting and planning, learn and practice communication and other professional skills, and become familiar with the internship and job search processes.

Requirements

The major in general management provides students with interests in more than one discipline with the flexibility to concentrate their elective course work in two areas. Course work in the areas noted below may be used for the general management major. Courses with significant international content are offered in several areas. Students with international business interests should also consider a study abroad program.

The core courses in the two focused areas of study must be completed with a C or better to take additional courses in those areas. Courses are offered on a rotating basis.

Accounting

- BUSACC 1204 - INTERMEDIATE FINANCIAL REPORTING 1
- BUSACC 1205 - INTERMEDIATE FINANCIAL REPORTING 2
- BUSACC 1210 - FINANCIAL STATEMENT ANALYSIS
- BUSACC 1216 - ADVANCED FINANCIAL ACCOUNTING
- BUSACC 1221 - STRATEGIC COST MANAGEMENT
- BUSACC 1236 - ACCOUNTING INFORMATION SYSTEMS
- BUSACC 1238 - AUDITING
- BUSACC 1242 - INDIVIDUAL TAX ACCOUNTING AND PLANNING
- BUSACC 1296 - ACCOUNTING INTERNSHIP *
- BUSACC 1298 - ACCOUNTING INDEPENDENT STUDY **

Finance

- BUSFIN 1311 - CORPORATE FINANCE
- BUSFIN 1316 - ADVANCED CORPORATE FINANCE
- BUSFIN 1321 - INVESTMENT MANAGEMENT
- BUSFIN 1326 - EFFICIENCY OF CAPITAL MARKETS
- BUSFIN 1327 - RISK MANAGEMENT
- BUSFIN 1328 - CAPITAL MARKETS
- BUSFIN 1331 - FINANCIAL INSTITUTIONS AND MARKETS
- BUSFIN 1341 - INTERNATIONAL FINANCE
- BUSFIN 1345 - MARKETS AND TRADING
- BUSFIN 1347 - MERGERS, ACQUISITIONS AND CORPORATE STRUCTURES
- BUSFIN 1351 - FINANCIAL MODELING
- BUSFIN 1355 - VALUATION
- BUSFIN 1390 - FINANCE INTERNSHIP *
- BUSFIN 1395 - FINANCE INDEPENDENT STUDY **

Human Resources Management

- BUSHRM 1665 - NEGOTIATING IN BUSINESS
- BUSHRM 1670 - GLOBAL WORKFORCE MANAGEMENT AND CHANGE
- BUSHRM 1675 - HUMAN RESOURCES STAFFING
- BUSHRM 1680 - COMPENSATION AND PERFORMANCE MANGEMENT
- BUSHRM 1685 - EMPLOYMENT AND LABOR RELATIONS
- BUSHRM 1690 - HUMAN RESOURCES MANGEMENT INTERNSHIP *
- BUSHRM 1695 - HUMAN RESOURCES MANGEMENT INDEPENT STUDY **

Management Information Systems

- BUSBIS 1060 - INTRODUCTION TO INFORMATION SYSTEMS
- BUSBIS 1600 - TECHNOLOGY-ENABLED BUSINESS TRANSFORMATION
- BUSBIS 1605 - DATABASE MANAGEMENT
- BUSBIS 1625 - ELECTRONIC COMMERCE
- BUSBIS 1630 - PROJECT MANAGEMENT
- BUSBIS 1635 - INFORMATION TECHNOLOGY SYSTEMS IN SUPPLY CHAINS
- BUSBIS 1640 - IT ARCHITECTURE AND PLATFORMS
- BUSBIS 1645 - INFORMATION SYSTEMS ETHICS
- BUSBIS 1615 - BUSINESS INFORMATION SYSTEMS INTERNSHIP
- BUSBIS 1620 - BUSINESS INFORMATION SYSTEMS INDEPENDENT STUDY

Marketing

- BUSMKT 1411 - MARKETING RESEARCH
- BUSMKT 1422 - PRINCIPLES OF SELLING
- BUSMKT 1425 - SALES FORCE MANAGEMENT
- BUSMKT 1426 - ADVERTISING AND SALES PROMOTION
- BUSMKT 1427 - PUBLIC RELATIONS MANAGEMENT
- BUSMKT 1428 - DIGITAL AND SOCIAL MEDIA MARKETING
- BUSMKT 1431 - PRODUCT DEVELOPMENT AND MANAGEMENT
- BUSMKT 1435 - SERVICES MARKETING
- BUSMKT 1441 - CONSUMER BEHAVIOR
- BUSMKT 1451 - RETAIL MANAGEMENT
- BUSMKT 1461 - INTERNATIONAL MARKETING
- BUSMKT 1481 - BRAND MANAGEMENT
- BUSMKT 1485 - PROJECTS IN MARKETING
- BUSMKT 1490 - MARKETING INTERNSHIP *
- BUSMKT 1495 - MARKETING INDEPENDENT STUDY **

Supply Chain Management

- BUSQOM 1725 - GLOBAL SUPPLY NETWORKS AND MANUFACTURING CULTURES IN LATIN AMERICA
- BUSSCM 1730 - MANAGING GLOBAL SUPPLY CHAINS
- BUSBIS 1635 - INFORMATION TECHNOLOGY SYSTEMS IN SUPPLY CHAINS
- BUSQOM 1790 - SUPPLY CHAIN MANAGEMENT INTERNSHIP *

Organizational Behavior

- BUSORG 1640 - THE ENTREPRENEURSHIP PROCESS
- BUSORG 1645 - CORPORATE ENTREPRENEURSHIP
- BUSORG 1650 - ISSUES IN CAREER MANAGEMENT
- BUSORG 1655 - INTERNATIONAL DIMENSIONS OF ORGANIZATIONAL BEHAVIOR
- BUSORG 1660 - MANAGING DIVERSTIY IN ORGANIZATIONS
- BUSORG 1670 - ORGANIZATIONAL BEHAVIOR INDEPENDENT STUDY **

Note:

* Plans for Internships must be approved by CBA Career Services before registration for the course is permitted. Internships will not be counted toward fulfilling Major requirements for students declaring after August 26, 2012.

** Plans for Independent Study courses must be approved by the Associate Dean before registration for the course is permitted.

Global Management, BSBA

BSBA Degree Requirements

The following sections describe the general requirements for all majors within the Bachelor of Science in Business Administration (BSBA) degree program:

The degree requirements applicable to a particular student are based upon the student's term of entry into the program and reflect any requirement changes that have been approved since this bulletin was published. These requirements and the student's progress toward the BSBA degree are noted on the student's online Undergraduate Advisement Transcript.

Graduation Requirements

One-hundred twenty credits are required for graduation with a BSBA degree. A minimum of 51 credits must be taken in the arts and sciences.

A student may use one course to fulfill two arts and sciences requirements.

Arts and Sciences Foundations: Basic Skills Requirements

There are seven basic skills that all BSBA students must master; these basic skills prepare students for future classes. The basic skills requirements include:

English Composition

- Students who earn 500 or above on SAT Verbal (Critical Reading) are placed into Seminar in Composition (or equivalent course).
- Students who earn below 500 on SAT Verbal (Critical Reading) will be placed into a Workshop in Composition course.
- Recommendations for ENGCMP 0201 or ENGCMP 0151 (tutorials) will be based on class diagnostic writing during add/drop period.
- English as a Second Language students will be placed into appropriate courses based on English Language proficiency.

All students are strongly encouraged to complete their English composition requirement(s) in the freshman year.

Students earning a score of 600 on the critical reading portion of the SAT, who also earn a score of 5 on the Advanced Placement (AP) English exam, will be awarded advanced standing credit for ENGCMP 0200 - SEMINAR IN COMPOSITION and 3 additional credits in English composition.

Second Language

Any one of the following fulfills the language requirement:

- Three years of study of a single second language in high school, passed with an average of C or better over the three years.
- Placement into level III of a second language on a University of Pittsburgh language placement test.
- Placement into level II of a second language on a University of Pittsburgh language placement test and completion of the appropriate course from the second course list below.
- Completion of an approved two course sequence of a foreign language.

Students should discuss specific foreign language course options with their academic advisor.

Calculus

Taking one course from the following list fulfills this requirement:
Note: *Only one of these courses may apply to the 120 total credits required for graduation.*

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
  or both
- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

Statistics

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT fulfills this requirement.

Economics

Both of the following courses must be taken to fulfill this requirement:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Arts and Sciences General Education Electives

In addition to fulfilling the basic skills requirements, students further supplement their business curriculum by taking courses from six general education categories including:

- Literature (one course)
- Music/art (one course)
- Philosophy (one course)
- Social sciences (two courses, each from a different discipline)
- Natural sciences (two courses)
- Foreign culture (two courses or participation in an approved study abroad program)

Note: *All students, including international students and U.S. citizens who have lived abroad for any length of time, must complete the foreign culture requirement.*

Contact the school for a complete listing of approved courses that meet these elective requirements.

Business Core Curriculum

The Business Core Curriculum:

The following courses (36 credits) are required of all CBA students:

- BUSSPP 0020 - MANAGING COMPLEX ENVIRONMENTS
- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING
- BUSQOM 0050 - QUANTITATIVE METHODS
- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSORG 1101 - FUNDAMENTALS OF BUSINESS COMMUNICTION (prerequisite 30 credits)
- BUSFIN 1030 - INTRODUCTION TO FINANCE (prerequisite 30 credits)
- BUSMKT 1040 - INTRODUCTION TO MARKETING (prerequisite 30 credits)
- BUSECN 1010 - MANAGERIAL ECONOMICS (prerequisite 30 credits)
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Other Business Requirements

CBA students must also satisfy one of the following requirements:

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS This one-credit course is required of all first-time CBA freshmen. In the course, new BSBA students will explore the majors offered in CBA, investigate global opportunities, develop networking and professional skills, create a resume, and learn how to connect with CBA's Career Services team regarding events, internship opportunities, and career development.

BUS 0020 - YOUR CAREER SUCCESS This one-credit course is required of all new CBA transfer students. In the course, students will participate in career exploration, develop and implement a personal strategy for career goal setting and planning, learn and practice communication and other professional skills, and become familiar with the internship and job search processes.

Requirements

The global management major enables students to develop expertise in important dimensions of management in a global context. The GLMGT major requires six (6) courses exposing students to the management of people (International Dimensions of Organizational Behavior, Global Workforce Policy), process (Managing Global Supply Chains), and policy (International Economic Issues for Managers; Global Strategy and Competitive Advantage), plus an integrative, senior-level course, focusing on either a company project or a major global industry. We see these three dimensions as intertwined and mutually critical for those who seek to add value to the management function of today's organizations and the firms of tomorrow. To the core understanding of a traditional management foundation, we add knowledge of a second language at the conversational level with the goal of preparing students to conduct business in a second language.

Second Language Requirement

Global management majors must complete second language study through Level 4 at the University of Pittsburgh with a minimum grade of C+ in each course, along with an additional 3-credit course in the language, also to be completed with a minimum grade of C+. If, for a particular language, the University offers instruction only through Level 4, this requirement is fulfilled by 3 credits of a course specific to the region in which the language is widely spoken, completed with a minimum grade of C+. For students already fluent in a second (or third) language, it is required that they will earn at least 8 credits in another language with a minimum grade of C+ in each course.

A student is not permitted to earn both a Global Management major and a Certificate in International Business.

Required Global Management Major Courses

Earn a minimum grade of C (2.00) in each of the following prerequisites to GLM courses:

- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- BUSHRM 1050 - HUMAN RESOURCES MANAGEMENT
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Global management majors must successfully complete the following courses

Global management majors must successfully complete the following courses with a C- or better in each course and a cumulative grade point average of 2.25.

- BUSORG 1655 - INTERNATIONAL DIMENSIONS OF ORGANIZATIONAL BEHAVIOR
- BUSECN 1508 - INTERNATIONAL ECONOMICS FOR MANAGERS
- BUSHRM 1670 - GLOBAL WORKFORCE MANAGEMENT AND CHANGE
- BUSSCM 1730 - MANAGING GLOBAL SUPPLY CHAINS
- BUSSPP 1740 - GLOBAL STRATEGY AND COMPETITIVE ADVANTAGE
- BUSSPP 1745 - PROJECTS IN GLOBAL MANAGEMENT

Note:

Global management majors must also earn a minimum GPA of 2.25 in nine (9) credits of second language beyond Level II or 6 credits of language beyond Level II plus 3 credits of a course specific to the region in which the language is widely spoken.

Complete a study abroad experience of at least four weeks in an internationally-based educational or work experience, preferably one making active use of a student's second language training. With permission, up to six (6) credits of the major area courses may be taken abroad as part of a semester study outside of the U.S. Permission will be based on examination of all course material.

* Plans for Internships must be approved by CBA Career Services before registration for the course is permitted. Internships will not be counted toward fulfilling Major requirements for students declaring after August 26, 2012.

** Plans for Independent Study courses must be approved by the Associate Dean before registration for the course is permitted.

Human Resources Management, BSBA

BSBA Degree Requirements

The following sections describe the general requirements for all majors within the Bachelor of Science in Business Administration (BSBA) degree program:

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Graduation Requirements

One-hundred twenty credits are required for graduation with a BSBA degree. A minimum of 51 credits must be taken in the arts and sciences.

A student may use one course to fulfill two arts and sciences requirements.

Arts and Sciences Foundations: Basic Skills Requirements

There are seven basic skills that all BSBA students must master; these basic skills prepare students for future classes. The basic skills requirements include:

English Composition

- Students who earn 500 or above on SAT Verbal (Critical Reading) are placed into Seminar in Composition (or equivalent course).
- Students who earn below 500 on SAT Verbal (Critical Reading) will be placed into a Workshop in Composition course.
- Recommendations for ENGCMP 0201 or ENGCMP 0151 (tutorials) will be based on class diagnostic writing during add/drop period.
- English as a Second Language students will be placed into appropriate courses based on English Language proficiency.

All students are strongly encouraged to complete their English composition requirement(s) in the freshman year.

Students earning a score of 600 on the critical reading portion of the SAT, who also earn a score of 5 on the Advanced Placement (AP) English exam, will be awarded advanced standing credit for ENGCMP 0200 - SEMINAR IN COMPOSITION and 3 additional credits in English composition.

Second Language

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Students should discuss specific foreign language course options with their academic advisor.

Calculus

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or both
- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

Statistics

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT fulfills this requirement.

Economics

Both of the following courses must be taken to fulfill this requirement:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
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Arts and Sciences General Education Electives

In addition to fulfilling the basic skills requirements, students further supplement their business curriculum by taking courses from six general education categories including:

- Literature (one course)
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Contact the school for a complete listing of approved courses that meet these elective requirements.

Business Core Curriculum

The Business Core Curriculum:

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- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSORG 1101 - FUNDAMENTALS OF BUSINESS COMMUNICTION (prerequisite 30 credits)
- BUSFIN 1030 - INTRODUCTION TO FINANCE (prerequisite 30 credits)
- BUSMKT 1040 - INTRODUCTION TO MARKETING (prerequisite 30 credits)
- BUSECN 1010 - MANAGERIAL ECONOMICS (prerequisite 30 credits)
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Other Business Requirements

CBA students must also satisfy one of the following requirements:

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS This one-credit course is required of all first-time CBA freshmen. In the course, new BSBA students will explore the majors offered in CBA, investigate global opportunities, develop networking and professional skills, create a resume, and learn how to connect with CBA's Career Services team regarding events, internship opportunities, and career development.

BUS 0020 - YOUR CAREER SUCCESS This one-credit course is required of all new CBA transfer students. In the course, students will participate in career exploration, develop and implement a personal strategy for career goal setting and planning, learn and practice communication and other professional skills, and become familiar with the internship and job search processes.

Marketing, BSBA

BSBA Degree Requirements

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- English as a Second Language students will be placed into appropriate courses based on English Language proficiency.

All students are strongly encouraged to complete their English composition requirement(s) in the freshman year.

Students earning a score of 600 on the critical reading portion of the SAT, who also earn a score of 5 on the Advanced Placement (AP) English exam, will be awarded advanced standing credit for ENGCMP 0200 - SEMINAR IN COMPOSITION and 3 additional credits in English composition.

Second Language

Any one of the following fulfills the language requirement:

- Three years of study of a single second language in high school, passed with an average of C or better over the three years.
- Placement into level III of a second language on a University of Pittsburgh language placement test.
- Placement into level II of a second language on a University of Pittsburgh language placement test and completion of the appropriate course from the second course list below.
- Completion of an approved two course sequence of a foreign language.

Students should discuss specific foreign language course options with their academic advisor.

Calculus

Taking one course from the following list fulfills this requirement:
Note: *Only one of these courses may apply to the 120 total credits required for graduation.*

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
  or both

- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

Statistics

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT fulfills this requirement.

Economics

Both of the following courses must be taken to fulfill this requirement:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Arts and Sciences General Education Electives

In addition to fulfilling the basic skills requirements, students further supplement their business curriculum by taking courses from six general education categories including:

- Literature (one course)
- Music/art (one course)
- Philosophy (one course)
- Social sciences (two courses, each from a different discipline)
- Natural sciences (two courses)
- Foreign culture (two courses or participation in an approved study abroad program)

Note: *All students, including international students and U.S. citizens who have lived abroad for any length of time, must complete the foreign culture requirement.*

Contact the school for a complete listing of approved courses that meet these elective requirements.

Business Core Curriculum

The Business Core Curriculum:

The following courses (36 credits) are required of all CBA students:

- BUSSPP 0020 - MANAGING COMPLEX ENVIRONMENTS
- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING
- BUSQOM 0050 - QUANTITATIVE METHODS
- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSORG 1101 - FUNDAMENTALS OF BUSINESS COMMUNICTION (prerequisite 30 credits)
- BUSFIN 1030 - INTRODUCTION TO FINANCE (prerequisite 30 credits)
- BUSMKT 1040 - INTRODUCTION TO MARKETING (prerequisite 30 credits)
- BUSECN 1010 - MANAGERIAL ECONOMICS (prerequisite 30 credits)
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Other Business Requirements

CBA students must also satisfy one of the following requirements:

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS This one-credit course is required of all first-time CBA freshmen. In the course, new BSBA students will explore the majors offered in CBA, investigate global opportunities, develop networking and professional skills, create a resume, and learn how to connect with CBA's Career Services team regarding events, internship opportunities, and career development.

BUS 0020 - YOUR CAREER SUCCESS This one-credit course is required of all new CBA transfer students. In the course, students will participate in career exploration, develop and implement a personal strategy for career goal setting and planning, learn and practice communication and other professional skills, and become familiar with the internship and job search processes.

Requirements

The major in marketing is designed to provide students with the conceptual background and practical skills necessary to address questions such as what new products a firm should introduce, how products should be priced, how to identify the best channels of distribution, and how best to promote new and existing products. Students majoring in marketing can pursue careers in retailing, sales management, marketing research, advertising and promotion, consumer product marketing, or industrial marketing.

In addition to the general BSBA requirements, 18 credits in marketing course work, plus the BSBA core course BUSMKT 1040 - INTRODUCTION TO MARKETING, are required for the marketing major.

BSBA Core Course in Marketing

Students must complete this course with a C or better to be eligible to take additional marketing courses:

- BUSMKT 1040 - INTRODUCTION TO MARKETING

Required Marketing Major Courses

- BUSMKT 1411 - MARKETING RESEARCH
- BUSMKT 1441 - CONSUMER BEHAVIOR

Marketing Electives

Courses are offered on a rotating basis.
(A minimum of four courses must be taken.)

- BUSMKT 1422 - PRINCIPLES OF SELLING
- BUSMKT 1425 - SALES FORCE MANAGEMENT
- BUSMKT 1426 - ADVERTISING AND SALES PROMOTION
- BUSMKT 1427 - PUBLIC RELATIONS MANAGEMENT
- BUSMKT 1428 - DIGITAL AND SOCIAL MEDIA MARKETING
- BUSMKT 1431 - PRODUCT DEVELOPMENT AND MANAGEMENT
- BUSMKT 1435 - SERVICES MARKETING
- BUSMKT 1451 - RETAIL MANAGEMENT
- BUSMKT 1461 - INTERNATIONAL MARKETING
- BUSMKT 1481 - BRAND MANAGEMENT
- BUSMKT 1485 - PROJECTS IN MARKETING
- BUSMKT 1490 - MARKETING INTERNSHIP (requires CBA approval)
- BUSMKT 1495 - MARKETING INDEPENDENT STUDY (requires CBA approval)
- BUSSCM 1730 - MANAGING GLOBAL SUPPLY CHAINS

Supply Chain Management, BSBA

BSBA Degree Requirements

The following sections describe the general requirements for all majors within the Bachelor of Science in Business Administration (BSBA) degree program:

The degree requirements applicable to a particular student are based upon the student's term of entry into the program and reflect any requirement changes that have been approved since this bulletin was published. These requirements and the student's progress toward the BSBA degree are noted on the student's online Undergraduate Advisement Transcript.

Graduation Requirements

One-hundred twenty credits are required for graduation with a BSBA degree. A minimum of 51 credits must be taken in the arts and sciences.

A student may use one course to fulfill two arts and sciences requirements.

Arts and Sciences Foundations: Basic Skills Requirements

There are seven basic skills that all BSBA students must master; these basic skills prepare students for future classes. The basic skills requirements include:

English Composition

- Students who earn 500 or above on SAT Verbal (Critical Reading) are placed into Seminar in Composition (or equivalent course).
- Students who earn below 500 on SAT Verbal (Critical Reading) will be placed into a Workshop in Composition course.
- Recommendations for ENGCMP 0201 or ENGCMP 0151 (tutorials) will be based on class diagnostic writing during add/drop period.
- English as a Second Language students will be placed into appropriate courses based on English Language proficiency.

All students are strongly encouraged to complete their English composition requirement(s) in the freshman year.

Students earning a score of 600 on the critical reading portion of the SAT, who also earn a score of 5 on the Advanced Placement (AP) English exam, will be awarded advanced standing credit for ENGCMP 0200 - SEMINAR IN COMPOSITION and 3 additional credits in English composition.

Second Language

Any one of the following fulfills the language requirement:

- Three years of study of a single second language in high school, passed with an average of C or better over the three years.
- Placement into level III of a second language on a University of Pittsburgh language placement test.
- Placement into level II of a second language on a University of Pittsburgh language placement test and completion of the appropriate course from the second course list below.
- Completion of an approved two course sequence of a foreign language.

Students should discuss specific foreign language course options with their academic advisor.

Calculus

Taking one course from the following list fulfills this requirement:
Note: *Only one of these courses may apply to the 120 total credits required for graduation.*

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
  or both
- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

Statistics

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT fulfills this requirement.

Economics

Both of the following courses must be taken to fulfill this requirement:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Arts and Sciences General Education Electives

In addition to fulfilling the basic skills requirements, students further supplement their business curriculum by taking courses from six general education categories including:

- Literature (one course)
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Note: *All students, including international students and U.S. citizens who have lived abroad for any length of time, must complete the foreign culture requirement.*

Contact the school for a complete listing of approved courses that meet these elective requirements.

Business Core Curriculum

The Business Core Curriculum:

The following courses (36 credits) are required of all CBA students:

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Other Business Requirements

CBA students must also satisfy one of the following requirements:

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS This one-credit course is required of all first-time CBA freshmen. In the course, new BSBA students will explore the majors offered in CBA, investigate global opportunities, develop networking and professional skills, create a resume, and learn how to connect with CBA's Career Services team regarding events, internship opportunities, and career development.

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Joint Major

Business Information Systems, BSBA

BSBA Degree Requirements

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BUS 0020 - YOUR CAREER SUCCESS This one-credit course is required of all new CBA transfer students. In the course, students will participate in career exploration, develop and implement a personal strategy for career goal setting and planning, learn and practice communication and other professional skills, and become familiar with the internship and job search processes.

Certificate

International Business Certificate

The Certificate Program in International Business (CPIB) builds upon the core curriculum in the College of Business Administration and is available only to BSBA students. Requirements include satisfactory completion of level 4 of a second language (a two-year, four-course sequence at the

University of Pittsburgh), specialized course work, and one term of approved study abroad or an international internship (3-12 credits). Students majoring in Global Management may not also earn the Certificate in International Business.

Leadership and Ethics Certificate

The Certificate Program in Leadership and Ethics (CPLE) builds upon the core curriculum in the College of Business Administration and is available only to BSBA students. Students admitted to the CPLE will be required to successfully complete all requirements for the BSBA degree requirements including satisfactory completion of specialized course work, internships, and a service-learning project integrating ethics and leadership.

Supply Chain Management Certificate

The Certificate in Supply Chain Management (CSCM) is offered jointly by the College of Business Administration and Swanson School of Engineering. Enrollment is available to BSBA students and students enrolled in the BS engineering programs in the School of Engineering. The CSCM provides students with the opportunity to understand important concepts in supply chain management and develop managerial and technical skills which are highly valued in today's corporate environment. The program also offers an international travel experience for students to gain hands-on exposure to global supply chain organizations. The CSCM requires 15 credits and is comprised of coursework offered by both CBA and the School of Engineering.

Pitt Business

Arjang Assad, Henry E. Haller Jr. Dean, MIT

Robert S. Atkin, Clinical Professor, PhD, University of Pittsburgh

Haimanti Banerjee, Clinical Assistant Professor, PhD, University of Iowa

Heidi Bartholomew, Clinical Assistant Professor of Business Administration and Faculty for the Kenneth R. Woodcock Leadership Fellows Program

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Kimberly Gleason, Clinical Associate Professor of Business Administration

Deborah Good, Clinical Assistant Professor of Business Administration

Josh Gunn, Assistant Professor of Business Administration, PhD, University of Missouri

Paul Harper, Clinical Assistant Professor of Business Administration, University of Virginia

G.G. Hegde, Associate Professor of Business Administration, PhD, University of Rochester

Vicky B. Hoffman, Professor of Business Administration and James H. Rossell Endowed Faculty Fellow, PhD, University of Michigan

Brian Hogan, Clinical Assistant Professor of Business Administration, PhD, Case Western University

Zia Hydari, Assistant Professor of Business Administration, PhD, Carnegie Mellon University

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Ray Jones, Clinical Associate Professor of Business Administration, Mehta Family Faculty Fellow, and Coordinator, Certificate Program in Leadership and Ethics, PhD, University of Pittsburgh

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Jay W. Sukits, Clinical Assistant Professor of Business Administration, MBA, Harvard University

Vanitha Swaminathan, Thomas Marshall Professor of Marketing, PhD, University of Georgia

Pandu R. Tadikamalla, Professor of Business Administration, PhD, University of Iowa

Ryan A. Teeter, PhD, Rutgers University

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Gary Tsarsis, Clinical Assistant Professor of Business Administration, PhD, Pace University

Luis Vargas, Professor of Operations, Decision Science and Artificial Intelligence, PhD, University of Sevilla

R. Venkatesh, Professor of Business Administration and Area Director, Marketing & Business Economics, PhD, University of Texas

Andrew Washburn, Clinical Assistant Professor, MBA, Harvard University

Richard E. Wendell, Professor of Business Administration, PhD, Northwestern University

Yun-Oh Whang, Clinical Assistant Professor of Business Administration, PhD, University of Southern California

Eugenia Wu, Assistant Professor of Business Administration and Katz Faculty Fellow in Marketing, PhD, Duke University

Yue Wu, Assistant Professor of Business Administration, PhD, INSEAD

Chad J. Zutter, Associate Professor of Business Administration and Dean's Excellence Faculty Fellow, PhD, Indiana University

College of General Studies

The College of General Studies (CGS) provides adult and nontraditional students with a wide variety of learning options. Students who enroll in the College of General Studies can complete a Bachelor of Arts or Bachelor of Science degree in career-oriented fields and in concentrations in the arts and sciences. In addition to a degree, students may prepare for transfer to any of the University's upper-division and professional schools. The College also offers a wide range of certificate programs in specialized fields such as health services, accounting, and information sciences. For those students who already have a degree but desire career-related study or preparation for graduate study, the College of General Studies permits them to register in a non-degree program. The College of General Studies uses the same faculties as the Dietrich School of Arts and Sciences and the professional schools of the University to provide instruction.

Professors and instructors teaching for the College of General Studies come from several undergraduate and professional schools across the University of Pittsburgh. CGS instructors include full-time faculty, regular part-time faculty, adjunct, graduate students, and professionals and leaders from throughout the greater Pittsburgh region. A list of CGS-affiliated instructors is available on the CGS Web site here.

The College of General Studies targets its curriculum to adult and transfer students who have been out of high school at least two years. Most of the students attending the College have full-time work or family responsibilities and therefore take full advantage of the unique delivery systems available for instruction. Students may enroll in traditional day classes, evening classes, or Saturday classes; or they may enroll for CGS Online courses.

Contact Information

University of Pittsburgh

College of General Studies

Office of the Associate Dean for Undergraduate Studies

140 Thackeray Hall

Pittsburgh, PA 15260

412-624-6480

Fax: 412-624-8265

E-mail: cgs@pitt.edu

www.cgs.pitt.edu

Admission through the Office of Admissions and Financial Aid

Degree-seeking students are admitted to the College of General Studies by the Office of Admissions and Financial Aid (OAFA).

Degree-Seeking Students

Those students who desire to complete a degree at the University of Pittsburgh, either in the College of General Studies or ultimately transferring elsewhere in the University, are required to apply as degree-seeking students through the University's Office of Admissions and Financial Aid (OAFA).

Students must meet a number of specific admissions criteria, depending on their previous experience. For details, refer to the Office of Admissions and Financial Aid Web site, www.oafa.pitt.edu.

Admission through the College of General Studies

Transfers from Other University of Pittsburgh Schools at the Pittsburgh Campus

To transfer to CGS from another school at the Pittsburgh campus, students should request that the other Pittsburgh campus school send their records to CGS. CGS will review the student records and send letters of acceptance to students who are eligible to transfer into CGS. To qualify, students must have a minimum overall GPA of 2.0.

Upon acceptance into CGS, students will receive evaluations of their previous course work, acknowledging the courses that have fulfilled CGS skills and general education requirements. To graduate with a degree from CGS, students are required to earn their last 30 credits while enrolled in CGS and to earn at least half of the credits for their majors, minors, and certificates while enrolled in the CGS.

Relocation from University of Pittsburgh Regional Campuses

1. For students seeking guaranteed relocation who have earned credits only from one of the regional campuses, the normal requirement is for completion of 45 credits at the specific regional campus, with a minimum GPA of 3.0.
2. For students seeking guaranteed relocation who have earned 30 or more credits at the specific regional campus and a total of 45 credits overall, a minimum GPA of 3.0 in all courses is required.
3. For students seeking relocation who have between 15 and 30 credits at the specific regional campus and a total of 45 credits overall, a minimum GPA of 3.0 is required in all courses, and the normal requirements of CGS for external transfer students must be met. For these students, relocation is not guaranteed. Students must complete at least 15 credits at the regional campus to transfer to the Pittsburgh campus.

Students Seeking a Second University of Pittsburgh Degree

Students who have earned a bachelor's degree in any University of Pittsburgh school or campus and wish to earn a second undergraduate degree in CGS should apply directly to CGS. Applicants should note the following.

- Course work for the second degree will continue to be recorded on the original University of Pittsburgh undergraduate transcript.
- All appropriate course work from the first degree will apply to the second degree.
- Students must earn a minimum of 30 new credits. No coursework repeated from the first degree will count toward the second degree.
- At least half of the credits for the second major toward the second degree must be earned while enrolled in CGS.
- The cumulative GPA and credit total will be based on all credits from the first degree and all new course work taken that applies to the second degree.

Students Seeking Reinstatement

The following students must apply for reinstatement through the College of General Studies.

- CGS students who have not enrolled for three consecutive terms (one calendar year);
- CGS students who have completed their suspension periods and wish to continue their studies; and
- Students who last attended another school at the Pittsburgh campus but have not enrolled in classes for three consecutive terms (one calendar year), have not attended another institution, and wish to be admitted to CGS.

Students who are returning after completing their suspension period will be reinstated on probation.

The deadline for reinstatement is August 15 for the fall term, December 15 for the spring term, and one week before the beginning of classes in the summer term or summer session. Students who last attended another University of Pittsburgh school on the Pittsburgh campus or who attended a regional campus must meet the admissions requirements for transfer to CGS. Students' academic standing upon reinstatement will continue to be that attained at the end of their last term in residence.

Students who are reinstated for a particular term but do not enroll for that term must apply for reinstatement again if they wish to attend for a later term. Students who have been away from the University for two or more years will be subject to the requirements of the school and of their major at the time of their reinstatement, rather than those in place at the time of their last attendance.

Certificate Program Admission

Students looking to broaden their educational experience or seeking professional development may elect to enroll in an academic certificate program. Certificate programs offer a course concentration in a specific area of study and may partially fulfill the student's degree requirements.

Students seeking admission to one of the certificate programs in the College of General Studies must meet CGS certificate admission criteria and complete the CGS online application. Students are required to provide transcripts from all colleges and universities attended. Students must take at least one-half of the coursework for the certificate at the University of Pittsburgh and earn a 2.0 or better GPA in certificate courses. The certificates offered by CGS are as follows:

- Accounting (post-baccalaureate program)
- Communication
- Community health assessment
- Corporate/community relations
- Digital media
- Gender, sexuality, and women's studies
- Information system design
- Leadership
- Managing health services programs and projects
- National preparedness and homeland security
- Nonprofit management
- Writing
- Writing for the professions

* Please note that the Leadership certificate must be earned in conjunction with a degree. To enter the Accounting certificate, students must already have a bachelor's degree with at least a 2.75 GPA.

Non-Degree Admission

Post-Baccalaureate Students

Students who already hold a bachelor's degree and desire to complete University course work as preparation for graduate study or for personal or professional interest, but do not desire to complete a second degree, may apply for admission as non-degree students. These students need to complete the CGS online application for admission and provide transcripts for all previous college work. Students who enroll under this program and later desire to earn a degree will be reviewed for admission under the normal admission criteria. Additional details are available at www.cgs.pitt.edu/admission.

Guest, Visiting, and Summer Visiting Students

Guest, Visiting, and Summer Visiting students are students enrolled in an undergraduate degree program at another university who plan to take courses for credit at the University of Pittsburgh with the intention of transferring those courses back to their home institution. To be eligible for admission, students must have a minimum 2.0 cumulative or overall GPA. Additional details are available at www.cgs.pitt.edu/admission.

Early Admission Option for Graduate Study

Students with a GPA of 3.5 or better planning to pursue graduate work at the University of Pittsburgh may want to consider the Early Admission Option for Graduate Study. This option allows students to use the first 24 credits of graduate work as the last 24 elective credits of their undergraduate program. The following graduate schools at Pitt allow this option in conjunction with the College of General Studies degree program: Graduate School of Public and International Affairs (GSPIA), Graduate School of Public Health, and the School of Law.

Note: Students interested in the early admission option for graduate study should contact their CGS advisor as soon as possible to discuss their intention and the process that needs to be followed.

Guidelines:

- Must be superior graduate school candidates and be admitted to the Pitt graduate program. Admissions requirements can be obtained from the graduate schools.
- Must have completed a minimum of ninety-six (96) credits toward the CGS degree, including all general education and major requirements (and no G grades), before the graduate program begins.
    - At least, the last thirty (30) of the ninety-six (96) undergraduate credits should be taken while the student is in residence in CGS, and before acceptance as a graduate student. Satisfactory completion of these requirements does not guarantee acceptance into the graduate program. This decision is made by the graduate program.
    - All other regulations governing the completion of credits for a CGS degree also apply.
- The graduate program must include a minimum of twenty-four (24) credits of graduate-level coursework. Students must earn a B or better grade in all graduate coursework. (S or H grades in the MSL program)
- Twenty-four (24) credits is the maximum number of graduate credits that can be used to fulfill free elective requirements of the undergraduate degree. A student may seek to use fewer than twenty-four (24) graduate credits toward their free elective credits if they have already partially fulfilled their elective requirements.

- Students must apply for graduation from CGS after completion of the first twenty-four (24) credits in their graduate program with grades of B or better. Students must have earned a total of at least 120 credits.

Note: Students who choose this option must be aware that enrolling as a graduate student may affect their financial aid package. Students are responsible for contacting the Financial Aid Office regarding this issue.

Financial Aid

The Office of Admissions and Financial Aid handles all financial aid processing for College of General Studies students. Obtain information regarding the necessary forms and important deadline dates from the University's financial aid Web site, www.oafa.pitt.edu/fahome.aspx or call 412-624-7488.

Students who wish to be considered for supplemental financial aid may apply through the Office of the Associate Dean. Students must have a completed current Free Application for Federal Student Aid (FAFSA) on file with the Office of Admissions and Financial Aid. CGS supplemental aid is awarded on a rolling basis and is need-based. The CGS supplemental financial aid application is available at www.cgs.pitt.edu/scholarships.

Academic and need-based scholarships are available through CGS. Information concerning these scholarships for enrolled CGS students is available at www.cgs.pitt.edu.

Career Services

A CGS career consultant is available to assist students with the formulation of career objectives and preparation for the job search. Various seminars are offered throughout the year, and a variety of resource materials are available for student use. For more information on CGS career services, visit: www.cgs.pitt.edu/career-services.

Class Locations and Times

Students in the College of General Studies have an array of options for where and when to pursue their course work.

Pittsburgh Campus

The full range of courses offered by the College of General Studies is available at the Pittsburgh campus. The 120-acre campus is located in Oakland.

CGS Online

CGS Online provides students with the opportunity to earn credit towards degrees and certificates through two course formats. All courses offered through CGS Online are Web-based, meaning that most course materials can be accessed through the University's course learning management system. CGS Online courses are offered in the following formats:

- **Web** courses feature Web-based instruction and interaction. Students interact with their instructors and other students through the Learning Management System Web site. Students are required to participate in online discussions and activities. Students complete the course requirements within one term and move through the course materials as a cohort.
- **Hybrid** courses combine Web-based interaction and face-to-face instruction. Students are required to attend scheduled workshops and participate in online discussions and activities. Students complete the course requirements within one term and move through the course materials as a cohort.

CGS Online courses meet the same standards for content excellence and expert instruction as our traditional classroom courses.

Saturday Classes

Saturday classes are offered on the Pittsburgh campus for students who find Saturday a convenient time to attend class.

Advanced Standing Policy

Applicants must submit official transcripts from each accredited college or university attended, whether or not it is intended that the courses be counted toward a degree. Grades for credits transferred are not used in computing a student's grade point average (GPA). All credits eligible for transfer are subject to the following regulations:

- Only courses with C or better grades will be considered for transfer.
- Courses must correspond with those offered by the University in objectives and content.
- The number of credits granted for a given course cannot exceed the number on the transcript from the school where they were earned, nor can it exceed the number earned in the corresponding courses at the University of Pittsburgh.
- A maximum of 90 credits may be transferred from a four-year institution and 60 credits from a two-year institution, however no more than 90 credits can be transferred.
- All of the credits required for a degree, whether earned in residence or transferred from another institution, must have been earned within 12 years prior to the date on which the degree is awarded. However, when given evidence that the previous courses still provide adequate preparation for courses yet to be taken and still represent a reasonable part of the total academic program, the statute of limitation may be waived. In such cases, the waiver is for a specific period during which the program must be completed.
- Upper-class students (those who have earned 60 or more credits) may not take courses at two-year schools.
- All transfer credits may be subject to reevaluation if a student transfers from one school to another or from one major to another within the University of Pittsburgh or becomes inactive and is subsequently readmitted.
- If a course for which advanced standing is given is repeated at the University of Pittsburgh, the advanced-standing credit is cancelled.

Advanced Placement and Credit by Examination

Students in CGS may also earn advanced standing credits through the following means:

College Level Examination Program (CLEP)

The CLEP program provides a way of earning college credits through testing. Specific regulations governing the awarding of CLEP general examination credits are available by calling 412-624-6600, from an academic advisor, or at www.cgs.pitt.edu/clep-exams.

Credit by Examination

In rare circumstances, credit by examination may be offered. Contact the Office of Student Records (studentrecords@as.pitt.edu or 412-624-6776) with questions. Students may be given credit for successfully completing the advanced-standing tests of the College Entrance Examination Board.

Students who are majoring in administration of justice and who have successfully completed Pennsylvania Act 120 or state police cadet training can receive up to 15 credits of advanced standing. The credits are awarded for specific courses.

Reserve Officer Training Corps (ROTC) Courses

Credits earned in aerospace science (Air Force ROTC), military science (Army ROTC), or naval science (Navy ROTC) through cross registration at Carnegie Mellon University are accepted toward a College of General Studies degree. CGS will grant up to four credits toward graduation for the following courses in lieu of or in combination with physical education courses: AFROTC 0001, AFROTC 0002, AFROTC 0003, and AFROTC 0004; MILS 0011, MILS 0012, MILS 0021, and MILS 0022; or first-year/sophomore level Navy ROTC courses from CMU.

Also, four junior and senior level courses from these three ROTC programs may be used as professional electives for the CGS degree program, if professional electives are permitted. These courses are AFROTC 1013, AFROTC 1014, AFROTC 1015, and AFROTC 1016 (all 3-credit courses); MILS 1031, MILS 1032, MILS 1041 and MILS 1042 (all 1-credit courses); and similar courses from Navy ROTC.

Internships

An internship is a supervised, work-related experience, volunteer or paid, which is related to an academic discipline and is sponsored, evaluated, and graded by a University faculty member. The internship is a new experience and does not represent credit for past work or continuation of the current employment situation. A detailed outline of CGS internship requirements is available at www.cgs.pitt.edu/programs/internships.

PLEASE NOTE: Several CGS majors require that you complete an internship at a facility that may or will require a criminal background check, an ACT 33/34 clearance, and perhaps a drug screen to determine whether you are qualified to participate in the internship. Additionally, in order to

become licensed or employed, many states will inquire as to whether the applicant has been convicted of a misdemeanor, a felony, or a felonious or illegal act associated with alcohol and/or substance abuse.

Study Abroad

College of General Studies students are encouraged to enhance their undergraduate education by including a study abroad experience. Credit may be earned toward a CGS degree through participation in either Pitt-sponsored, exchange, or Pitt-recognized programs. Students may study in virtually any part of the world in these programs or others offered by many American and international institutions. Some programs are of short duration to fit the schedules of students with extensive work, family and other commitments.

Approval for credit must be obtained before studying abroad. The study abroad advisor provides program approval and CGS Academic Affairs approves course selection and credits. You should have at least a 2.75 GPA before seeking permission to study abroad.

See www.cgs.pitt.edu/study-abroad for further details. Visit www.abroad.pitt.edu for additional information.

Academic Standards

The College of General Studies' Guidelines on Academic Integrity outlines obligations of both students and instructors for maintaining academic integrity in CGS classes. An electronic copy of this publication, which lists the obligations, procedures, penalties, and remedies for maintaining such integrity, is available on the College of General Studies Web site.

Graduation Requirements

- Students are required to make a graduation appointment with their advisor when registering for classes for their final term. During this appointment, students and their advisor review all the requirements and plan for their last term, as well as share details concerning commencement and graduation ceremonies at the University. Learn more at www.cgs.pitt.edu/advising
- Students must apply for graduation from CGS in the semester prior to their final term. Students must have minimum of 120 credits in order to graduate.
- Students receive a BA or BS degree depending upon the CGS major. The final undergraduate transcript will specify the major completed in CGS.
- The GPA for graduation from CGS will be calculated solely on the earned Pitt credits on the undergraduate transcript. The graduate program courses appear on the graduate transcript and the undergraduate transcript is noted: Baccalaureate degree awarded in conjunction with graduate degree.
- In order for CGS students to graduate with honors from the University, they must have at least 60 letter-graded University of Pittsburgh credits at the undergraduate level. Courses at the graduate level and undergraduate courses graded S or H are not included in this 60 credit requirement.

The Bachelor of Arts or Bachelor of Science degree will be awarded upon the fulfillment of the following conditions:

- Completion of at least 120 credits of University work in one of the prescribed curricular courses, by advanced standing, or by examinations.
- Completion of at least one-half of the major or 15 credits, whichever is greater, at the University of Pittsburgh, Pittsburgh campus.
- Completion of the senior year (30 credits) in the College of General Studies.
- Attainment of at least a cumulative grade point average of 2.00 in courses taken at the University of Pittsburgh.
- Attainment of at least a cumulative grade point average of 2.00 in the major.
- Satisfactory completion of all required CGS and major courses.

Grading Policy

There are two grading options available to students registering for courses offered by the College of General Studies: the letter grade option and the satisfactory/no-credit (S/NC) option (formerly the S/N option).

Core requirement courses in the student's major must be taken for the letter grade. Students can apply "S" grades only to internship, study abroad, experiential learning, and elective courses in the major. Students can take a maximum of six credits with the S/NC grade and have those credits applied to CGS major requirements.

Under the S/NC option, a student who does satisfactory work (a grade of C or better) in a course receives the grade of "S." If the student's work is not satisfactory (a grade of C- or lower), the grade of "NC" (for no credit) is given. Courses for which "S" grades are earned are counted toward

graduation but are not computed in the GPA. Courses for which "NC" grades are earned are not counted toward graduation because the "NC" designates that no credit was earned. These courses cannot be applied toward university requirements.

For most courses, students who wish to take a course with the S/NC Grade Option will need to complete the S/NC Grade Option/Audit Request form (Registrar's Office) and the CGS Grade Option Waiver form by the end of the fourth full week of classes during a term (second full week of classes during summer sessions 1 and 2). If the student does not fill out a Grade Option/Audit Request form for a course in which more than one grade option is available, the default option (generally a letter grade) will automatically be selected. There are some formal limitations to a student's choice of grading systems (see below); Students should consult with their academic advisor before deciding to take a course S/NC. See also the CGS Advising page for details.

Limitations to the choice of the satisfactory/no-credit (S/NC) grade option in the College of General Studies:

1. Students can take a maximum of 6 credits with the S/NC grade and have those credits applied to CGS major requirements. There is one exception to this policy: Students who study abroad and take courses that will be applied as S grades through transfer credit can apply up to nine credits to their major requirements. Students can only apply "S" grades to internship, experiential learning, and elective courses in the major. Core requirement courses must be taken for the letter grade
2. Under certain circumstances, departments may declare a course available only for a letter grade or as satisfactory/no-credit. In such courses, students will not have a choice for the other grade option.

G Grade

At the discretion of an instructor, a G grade may be awarded when students who have been attending a course and making regular progress are prevented from completing the course due to extenuating personal circumstances. Students who are assigned a G grade are required to complete course requirements no later than one year after the term or session in which the course was taken, including the summer term, or by an earlier deadline established by the instructor. After that year, the grade will automatically change to NG; an NG grade cannot be changed, and the credits will no longer appear as "in progress." The student will be required to re-register for the course if it is needed to fulfill requirements for graduation. The College of General Studies encourages students with G grades to work with their instructors to complete the requirements for the course as soon as possible. G and NG cannot be applied to graduation requirements.

At the time of requesting a G grade, the student should arrange with the instructor a plan and schedule for completing the course work. The instructor and student must also fill out the CGS G-grade Contract form. For additional information, visit www.cgs.pitt.edu/faculty-resources.

Academic Standing

Students in danger of falling below a 2.00, or who have a significant decrease in a term GPA, may be placed on **Academic Warning**. They may be required to complete an academic success contract with their advisor which places limitations or requirements on the student in an attempt to help them perform better academically and connect them with university resources.

Students who have earned a minimum of 12 credits in the College of General Studies and whose cumulative grade point average falls below 2.00 at the end of any term will be placed on **Academic Probation**. Students placed on probation may be limited to 6-12 credits a term until they have regained good academic standing and will be required to complete an academic success contract that stipulates the conditions of their probation.

Any students placed on probation who fail to regain good academic standing by the time they have completed an additional 12 credits of course work are subject to **Academic Suspension**. Suspension lasts for one calendar year.

After the 12 credits following suspension, students whose GPA remains below 2.00 may be subject to **Academic Dismissal**. Dismissed students are not eligible for reinstatement.

Dean's List

Following the fall and spring terms, full-time College of General Studies students whose grades in the preceding term indicate outstanding academic achievement are recognized on the Dean's List. To be placed on the Dean's List, a student must have earned at least 12 credits (not including courses taken on the Satisfactory/No-Credit option) with a term GPA of at least 3.50. Part-time students will be recognized following each spring term. To be placed on the Dean's List, a part-time student must have earned at least 12 credits (not including courses taken on the Satisfactory/No-Credit option) across the consecutive fall and spring semesters with a cumulative GPA of at least 3.50 for those terms.

Degrees Conferred

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors are available by combining on-campus and online courses.

Bachelor of Arts:

- Administration of Justice
- Health Services
- Humanities - this major cannot be declared after fall 2020
- Legal Studies
- Media and Professional Communications
- Public Service
- Social Sciences - this major cannot be declared after fall 2020

Bachelor of Science:

- Dental Hygiene
- Health Services
- Natural Sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to the Dietrich School of Arts and Sciences after completing 12 credits including the algebra and seminar in composition requirements. Admission is determined by the Dietrich School of Arts and Sciences.

Second Degree

Students who are interested in pursuing a second degree must complete all CGS degree and major requirements. These may be completed by combining CGS courses with transfer credits from previous academic course work.

For the second degree, students must complete a minimum of 30 credits in CGS, including at least half of the credits required for the new major (15-18 credits depending on the major).

Double and Triple Majors and Credit Overlap

Students can declare a double or triple major, but will usually earn only one degree. If one major leads to the BA degree and another to the BS degree, students must decide when applying for graduation which degree they wish to receive.

Double Degrees

College of General Studies students may choose to pursue more than one undergraduate degree simultaneously, either within CGS (i.e., both a BA and a BS) or in another undergraduate school of the University. In general, earning two degrees requires a minimum of 150 credits and the completion of the curriculum requirements of both schools.

- The College of General Studies (CGS) and the College of Business Administration (CBA) offer a Double Degree program in which students earn both the BA in Health Services through CGS and the BS in Business Administration (BSBA) through CBA. The double degree program is designed for students who are interested in the intersection of health care management and business administration.

Overlapping Courses Between Majors, Certificates, and Minors

(effective for students admitted to CGS for Spring 2019 and beyond)

Overlapping Credits between CGS programs and programs in other schools

A maximum of two courses can overlap between a CGS major or certificate and a second major in another school. No course overlaps are allowed between a CGS certificate and a certificate in another school. No course overlaps are allowed between a CGS minor and another minor, certificate, or major outside of CGS.

Overlapping Credits between majors, certificates and minors within CGS

Courses used for a minor cannot overlap with courses used for a major or a certificate. Students can overlap a maximum of six (6) credits between a CGS certificate and a CGS major and/or CGS certificate. The following exceptions apply:

* Students cannot receive a certificate in a program in which they are pursuing their major and/or area of concentration. These programs include: Public Service BA (all three tracks and corresponding certificates), Health Services BA (all two tracks and corresponding certificates), Media and Professional Communications BA (all three tracks and corresponding certificates). Note: Media and Professional Communications majors CAN pursue a certificate outside their area of concentration (major track), in which case they are only allowed to overlap core requirements between their major and a certificate.

Program and Course Offerings

Major

Administration of Justice, BA

In American society, the justice system is a central social institution. Its effects on individuals and social groups give it a pivotal role in a changing society. The administration of justice program is an upper-division undergraduate course of interdisciplinary study in the liberal arts and sciences that leads to a Bachelor of Arts degree. The goal of this baccalaureate program is to develop an understanding of the evolution, theory, structure, functioning, and processes of change in the total system of criminal justice in our society.

Administration of justice majors develop competence in one of four specialized areas:

- Adult and juvenile corrections
- Law enforcement practice
- Forensics
- Cybercrime

Major Requirements

Students must complete a minimum of 120 credits (approximately 40 courses) for the Bachelor of Arts degree with a major in administration of justice. Of this total, 30 credits (10 courses) make up the major, which is satisfied by taking courses to complete the core requirements, area of concentration, and major electives. The remaining credits required for the degree are outlined in the General Education Requirements section on this page.

An outline of the Administration of Justice major requirements follows:

Core Requirements: 12 credits (four courses)

Administration of Justice

- ADMJ 0500 - INTRODUCTION TO ADMINISTRATION OF JUSTICE
- ADMJ 1400 - INTRODUCTION TO CRIMINAL LAW
- ADMJ 1450 - CRITICAL ISSUES IN CRIMINAL JUSTICE
- ADMJ 1900 - PRESERVICE INTERNSHIP

Area of Concentration: 9 credits (three courses)

Choose one of the four areas of specialization. All courses listed under a given area are required.

Adult and Juvenile Corrections

- ADMJ 1220 - DEVIANCE AND THE LAW

- ADMJ 1300 - INTRODUCTION TO CORRECTIONS
- PSY 0205 - PSYCHOPATHOLOGY

Law Enforcement Practice

- ADMJ 1200 - INTRODUCTION TO LAW ENFORCEMENT
- ADMJ 1265 - ADVANCED TOPICS IN CRIMINOLOGY or ADMJ 0600 INTRODUCTION TO CRIMINOLOGY
- ADMJ 1410 - INTRODUCTION TO CRIMINAL PROCEDURE

Forensics

- ADMJ 1100 - CRIME SCENE INVESTIGATION
- ADMJ 1115 - CRIMINALISTICS
- LEGLST 1230 - PSYCHOLOGY AND LAW

Cybercrime

- ADMJ 1234 - INTRODUCTION TO CYBERCRIME

Choose two of these four concentration courses

- ADMJ 1236 - INTERNATIONAL ORGANIZED CRIME
- ADMJ 1238 - CYBER SECURITY, LAW, AND MONEY LAUNDERING
- ADMJ 1246 - FINANCING TERRORISM
- ADMJ 1425 - PRINCIPLES OF HOMELAND SECURITY

Major Electives: 9 credits (three courses)

- ADMJ 0100 - SOCIETY AND THE LAW
- ADMJ 0600 - INTRODUCTION TO CRIMINOLOGY
- ADMJ 1100 - CRIME SCENE INVESTIGATION
- ADMJ 1115 - CRIMINALISTICS
- ADMJ 1118 - CRIMINALISTICS LAB
- ADMJ 1200 - INTRODUCTION TO LAW ENFORCEMENT
- ADMJ 1205 - INTRODUCTION POLICE MANAGEMENT
- ADMJ 1210 - JUVENILE DELINQUENCY
- ADMJ 1220 - DEVIANCE AND THE LAW
- ADMJ 1225 - THE JUVENILE JUSTICE PROCESS
- ADMJ 1230 - WHITE COLLAR CRIME
- ADMJ 1234 - INTRODUCTION TO CYBERCRIME
- ADMJ 1235 - ORGANIZED CRIME
- ADMJ 1236 - INTERNATIONAL ORGANIZED CRIME
- ADMJ 1238 - CYBER SECURITY, LAW, AND MONEY LAUNDERING
- ADMJ 1242 - GENDER, RACE, CLASS, AND CRIME
- ADMJ 1245 - TERRORISM
- ADMJ 1246 - FINANCING TERRORISM
- ADMJ 1265 - ADVANCED TOPICS IN CRIMINOLOGY
- ADMJ 1300 - INTRODUCTION TO CORRECTIONS
- ADMJ 1350 - PROBATION AND PAROLE
- ADMJ 1410 - INTRODUCTION TO CRIMINAL PROCEDURE (also offered as LEGLST 1141)
- ADMJ 1425 - PRINCIPLES OF HOMELAND SECURITY (also offered as PUBSRV 1425)
- ADMJ 1495 Criminal Justice Study Abroad (UPitt-Bradford)
- ADMJ 1901 - INDEPENDENT STUDY
- LEGLST 1230 - PSYCHOLOGY AND LAW
- URBNST 0400 - CRIME, PUNISHMENT, JUSTICE, REINTEGRATION

- any Pitt Prison Education Project (PPEP) course (codes vary)

Note:

This major requires that you complete an internship at a facility outside the University, and that facility may require a criminal background check, Act 33/34 clearance, and perhaps drug screening to determine whether you are qualified to participate in the internship. Additionally, in order to become licensed or employed, many states will inquire as to whether the applicant has been convicted of a misdemeanor, a felony, or a felonious or illegal act associated with alcohol and/or substance abuse.

Transfer Credit Agreement

A transfer credit agreement has been established between the criminal justice program at Butler County Community College and the administration of justice program at Pitt. The agreement gives a course-by-course outline of the associate's degree program and the equivalent course or requirement fulfilled for CGS. Courses transfer if graded C or better. For a copy of the transfer agreement for a specific community college, contact CGS.

Police Academy Certification

Students may receive up to 15 transfer credits for completion of Pennsylvania Municipal Police Academy Act 120 or state police cadet training. Certification course work is equivalent to ADMJ 0500, ADMJ 1400, ADMJ 1410, and two ADMJ elective courses.

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

General Education Requirements (GERs) provide you with an opportunity to discover interests you never knew you had, all while earning credits toward graduation. And, no matter what your future holds, be it a career or grad school, GERs prepare you by emphasizing skills employers want (like critical thinking, problem solving, written and oral communication) and giving you the opportunity to become more aware of our increasingly diverse and interconnected world.

The College of General Studies provides a liberal arts and pre-professional education for undergraduate students that is grounded in scholarly excellence. Pitt offers you the knowledge, understanding, analytical tools, and communication skills you need to become perceptive, reflective, and intellectually self-conscious citizens within a diverse and rapidly changing world. GERs are at the core of our education.

Our **General Education Requirements changed for students entering as of Fall 2018 (2191) term**. See the CGS General Education Requirements for Fall 2018 and afterward here or visit the CGS General Education Requirements website.

Writing (9 credits)

Written communication is central to almost all disciplines and professions. Developing written proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment.

Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

Students are exempt from having to take Algebra with a 620 SAT Math or 27 ACT Math. Students who do not meet these criteria must earn a C- or higher in MATH 0020, MATH 0025, MATH 0031, CS 0004, or CS 0007. Given the importance of establishing a sound foundation in mathematics, all students are required to satisfy the Algebra requirement by the time they have completed 30 credits in enrollment.

Quantitative and Formal Reasoning (3 credits)

All students are required to take and pass with a grade of C- or better at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic.

A C- or better is needed in a course that satisfies this requirement. Students who qualify for placement in an upper-level course in mathematics on a proficiency placement test are exempt.

Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study, if available. Diversity courses may also be courses that fulfill other General Education Requirements. (3 credits if not overlapped with another General Education course)

Language/Communication (6-10 credits)

All students are required to take a sequence of two courses that provide them with advanced study of a second language other than English, or the ability to develop their skills in oral and professional communication. Students choose one of the following options below:

Option 1: A Sequence of Two Courses in a Second Language (6-10 credits)

Students complete with a grade of C- or better two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
2. Passing a special proficiency examination;
3. Transferring credits for two terms or more of approved university-level instruction in a second language with grades of C or better;
4. Having a native language other than English.

Option 2: A Sequence of Two Courses in Oral and Professional Communication (6 credits)

These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

Humanities and Arts, Social Sciences, and Natural Sciences (27 credits)

Each student is required to take nine courses in the humanities, social sciences, and natural sciences as distributed below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

One course in Literature (3 credits)

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

One course in Creative Work (3 credits)

In this course, students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theater, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

One course in Philosophical Thinking or Ethics (3 credits)

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

One course in Social Sciences (3 credits)

A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

One course in Historical Analysis (3 credits)

In this course, students will develop skills and methods by which to understand significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.

Three courses in the Natural Sciences (9 credits)

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

One course in Cross-Cultural Awareness (3 credits)

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
- Diversity courses are allowed to overlap with other general education requirements.
- Writing ('W') courses are allowed to overlap with other general education requirements except for the Professional Communication requirement.

- Students may overlap the second course in their language sequence, taken at the college level, with the Geographic Region requirement, except for American Sign Language. This does not apply to students who satisfy the Language requirement through high school study, a proficiency examination, or native proficiency.

Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors offer a combination of face-to-face and online courses.

- Administration of justice
- Dental hygiene (for licensed dental hygienists)
- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Dental Hygiene, BS

Opportunities for health care professionals are becoming available as a result of the changes in health care delivery formats. To prepare dental hygiene graduates for employment opportunities created by these changes, the University of Pittsburgh's College of General Studies and the School of Dental Medicine have developed a course of study that leads to a Bachelor of Science in dental hygiene. This degree is intended for those students who have graduated from accredited dental hygiene programs with a certificate or associate's degree. (See School of Dental Medicine listings in this bulletin for information about the Associate of Science in Dental Hygiene program.) The Bachelor of Science degree enhances the already completed professional training and provides important exposure to the liberal arts. The combination of basic sciences, clinical experiences, and liberal arts strengthens the career opportunities for dental hygienists in business, sales, dental hygiene education, and research.

A distinct advantage of the Bachelor of Science degree is that hygienists can practice their profession following receipt of their certificate in dental hygiene and be employed while completing the requirements for the bachelor's degree. Class schedules can be tailored to work schedules. Classes are available in the evening, during the day, on Saturday, and through CGS Online. Attendance can be on a full-time or part-time basis.

Program Requirements

The following program requirements must be met to receive the Bachelor of Science degree:

- Students must earn a minimum of 131 credits to complete the Bachelor of Science degree. Of this 131-credit total, 30 credits must be at the 1000 (junior/senior) level. The courses must be completed within five years of enrolling in the program.
- Students who are transferring from certificate/associate degree hygiene programs to the College of General Studies (CGS) dental hygiene Bachelor of Science degree program complete 39 credits of CGS general education and dental hygiene track course work.
- At least 30 of the 39 credits must be completed at the University of Pittsburgh. Contact CGS Advising for information about credits that transfer from other institutions or if you completed your dental hygiene certificate at Pitt before 1995.

Required Courses (39 credits)

The required courses are listed below.

CGS General Education Courses (33 credits)

Our General Education Requirements changed for students entering as of Fall 2018 (2191) term.

Listed below are the revised CGS General Education Requirements for dental hygiene students for Fall 2018 and afterward. (If you were admitted to the CGS Dental Hygiene Program prior to Fall 2018, your general education requirements are listed here.)

Note: 9-15 credits in courses below must be at the 1000-level depending on the student's area of concentration in the major. One of the courses taken below must also satisfy a 'Diversity' General Education requirement.

Writing (6 credits)

- Two "W" courses

Mathematics (3 credits)

- Algebra or CS course

Humanities and Arts, Social Sciences, and Natural Sciences (15 credits)

- 6 credits in 2 courses that satisfy 2 of the 3 following general education requirements: *The Arts, Creative Work, Philosophical Thinking or Ethic*s.
- 3 credits in a course that satisfies the Social Science general education requirement.
- 3 credits in a course that satisfies the Literature general education requirement.
- 3 credits in a course that satisfies the Historical Analysis general education requirement.

Global Awareness and Cultural Understanding (9 credits)

- 3 credits in a course that satisfies the Global Issues general education requirement.
- 3 credits in a course that satisfies the Specific Geographic Region general education requirement.
- 3 credits in a course that satisfies the Cross-Cultural Awareness general education requirement.

Dental Hygiene Tracks (6 credits)

Students must choose a concentration in health management, education, or research.

Health Management

- DENHYG 1921 - HEALTH MANAGEMENT SEMINAR
- DENHYG 1922 - HEALTH MANAGEMENT PRACTICUM

Education

- DENHYG 1901 - ALLIED HEALTH EDUCATION
- DENHYG 1902 - ALLIED HEALTH EDUCATION PRACTICUM

Research

- NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE or
- PSY 0035 - RESEARCH METHODS or
- SOC 0230 - SOCIAL RESEARCH METHODS
- Elective

Note:

In this 39-credit program, 18 credits should be completed using 1000-level course work. These 18 credits, when combined with the twelve credits for DENHYG 1544, DENHYG 1545 , DENHYG 1547, DENHYG 1549 , and DENHYG 1689 completed in the dental hygiene program, meet the CGS requirement for 30 credits of 1000-level course work. Check with an advisor before registering. Requirements are subject to change.

Health Services, BA

The health services major is an interdisciplinary course of study designed to prepare students to work in health care. The program analyzes the structure of the health care industry; identifies cultural, legal, and environmental factors that impact health; and provides students with communication and management skills.

Students choose one of two fields:

- Managing health services programs and projects gives students key administrative and business skills, with an emphasis on grant and research project management.
- Community health assessment provides skills to assess the physical, social, and environmental factors influencing health behaviors.

Major Requirements

A minimum total of 120 credits is required for the Bachelor of Arts degree with a major in health services. Of this total, the major consists of 3 credits of prerequisite courses and 33 credits of core and specialization courses. The remaining credits for the degree are outlined on the General Education Requirements section on this page.

Prerequisite: Computer Competency

Choose one of the following courses to fullfill the 3-credit prerequisite coursework. Check with an advisor for information about other options.

- CS 0004 - INTRODUCTION TO COMPUTER PROGRAMMING-BASIC
- CS 0007 - INTRODUCTION TO COMPUTER PROGRAMMING
- CS 0008 - INTRODUCTION TO COMPUTER PROGRAMMING WITH PYTHON
- INFSCI 0010 - INTRODUCTION TO INFORMATION, SYSTEMS AND SOCIETY
- PUBSRV 0040 - PUBLIC SERVICE TECHNOLOGIES

Health Field Core (15 credits)

- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION Health Communication
- HRS 1017 - INTRODUCTION TO EPIDEMIOLOGY
- NUR 1829 - CONTEM ISSUES CROSS CULTL HEALTH
- PUBSRV 1305 - HEALTH, LAW AND ETHICS
- SOC 0477 - MEDICAL SOCIOLOGY

Specialization Tracks (18 credits)

Students take a total of two required courses and four elective courses. Check with an academic advisor for course availability and additional elective options.

Track 1: Managing Health Services Programs and Projects

Required, choose two:

- BUSERV 1915 - INTRODUCTION TO MANAGEMENT
- HRS 1009 - ORGANIZATIONAL THEORY & BEHAVIOR or
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR or
- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION or
- PSY 1635 - ORGANIZATIONAL PSYCHOLOGY
- PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS

Note

If two organizational courses are taken, one will count as an MHSPP elective.

Electives, choose four:

- AFRCNA 1710 - AFRICAN AMERICAN HEALTH ISSUES
- ANTH 1722 - CULTURE AND POLITICS OF MENTAL HEALTH
- ANTH 1726 - GLOBAL PHARMACEUTICALS
- ANTH 1761 - PATIENTS AND HEALERS: MEDICAL ANTHROPOLOGY 1
- COMMRC 1106 - SMALL GROUP COMMUNICATION
- ECON 0220 - INTRO TO HEALTH ECONOMICS
- ENGCMP 1400 - GRANT WRITING
- HIM 1455 - QUALITY MANAGEMENT
- HIM 1465 - REIMBURSEMENT SEMINAR
- HIST 0709 - HISTORY OF GLOBAL HEALTH
- HIST 1090 - HISTORY OF MEDICINE AND HEALTH CARE
- HIST 1706 - DRUGS IN GLOBAL HISTORY
- HPS 0612 - MIND AND MEDICINE
- HRS 1006 - INTRO TO HUMAN NUTRITION
- NROSCI 0081 - DRUGS AND BEHAVIOR
- PHIL 1360 - BIOMEDICAL ETHICS
- PSY 1210 - INTRODUCTION TO CLINICAL PSYCHOLOGY
- PUBSRV 1110 - FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR
- PUBSRV 1120 - HUMAN RESOURCES MANAGEMENT IN THE PUBLIC SECTOR
- SOC 0473 - SOCIOLOGY OF GLOBALIZATION AND HEALTH

Track 2: Community Health Assessment

Required, choose two:

- NUR 1765 - RISK FACTORS AND HEALTH
- SOC 1450 - HEALTH AND ILLNESS
- PUBSRV 1310 - DIVERSITY ISSUES IN PUBLIC SERVICE

Electives, choose four:

- AFRCNA 1710 - AFRICAN AMERICAN HEALTH ISSUES
- ANTH 1722 - CULTURE AND POLITICS OF MENTAL HEALTH
- ANTH 1726 - GLOBAL PHARMACEUTICALS
- ANTH 1727 - HEALTH AND ENVIRONMENT IN PITTSBURGH
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- ECON 0220 - INTRO TO HEALTH ECONOMICS
- HIST 0709 - HISTORY OF GLOBAL HEALTH
- HIST 1090 - HISTORY OF MEDICINE AND HEALTH CARE
- HIST 1706 - DRUGS IN GLOBAL HISTORY
- HPS 0613 - MORALITY AND MEDICINE
- HRS 1006 - INTRO TO HUMAN NUTRITION
- NROSCI 0081 - DRUGS AND BEHAVIOR
- NUR 1634 - HEALTH CARE DELIVERY IN OMAN
- PSY 1210 - INTRODUCTION TO CLINICAL PSYCHOLOGY
- PSY 1215 - HEALTH PSYCHOLOGY
- PSY 1230 - PSYCHOLOGY OF DEATH AND DYING
- PSY 1235 - ALCOHOL USE AND ABUSE
- PSY 1635 - ORGANIZATIONAL PSYCHOLOGY
- PUBHLT 1001 - INTRODUCTION TO GLOBAL HEALTH
- PUBHLT 1002 - SPECIAL TOPICS IN GLOBAL HEALTH
- PUBSRV 1100 - PRACTICES IN PUBLIC ADMINISTRATION
- PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT
- REHSCI 1018 - SURVEY OF HEALTH AND REHABILITATION PROFESSIONS
- REHSCI 1290 - PRACTICAL ISSUES IN DISABILITY
- SOC 0473 - SOCIOLOGY OF GLOBALIZATION AND HEALTH

Notes

Requirements subject to change. Check with an academic advisor before registering.

An internship is available through the College of General Studies. Please see your advisor for additional information.

Pitt Business-Health Services Double Degree

The College of General Studies (CGS) and the College of Business Administration (CBA) offer a double degree program in which students earn both the BA in Health Services through CGS and the BS in Business Administration (BSBA) through CBA. The double degree program is designed for students who are interested in the intersection of health care management and business administration. Learn more.

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

General Education Requirements (GERs) provide you with an opportunity to discover interests you never knew you had, all while earning credits toward graduation. And, no matter what your future holds, be it a career or grad school, GERs prepare you by emphasizing skills employers want (like critical thinking, problem solving, written and oral communication) and giving you the opportunity to become more aware of our increasingly diverse and interconnected world.

The College of General Studies provides a liberal arts and pre-professional education for undergraduate students that is grounded in scholarly excellence. Pitt offers you the knowledge, understanding, analytical tools, and communication skills you need to become perceptive, reflective, and intellectually self-conscious citizens within a diverse and rapidly changing world. GERs are at the core of our education.

Our **General Education Requirements changed for students entering as of Fall 2018 (2191) term**. See the CGS General Education Requirements for Fall 2018 and afterward here or visit the CGS General Education Requirements website.

Writing (9 credits)

Written communication is central to almost all disciplines and professions. Developing written proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment.

Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

Students are exempt from having to take Algebra with a 620 SAT Math or 27 ACT Math. Students who do not meet these criteria must earn a C- or higher in MATH 0020, MATH 0025, MATH 0031, CS 0004, or CS 0007. Given the importance of establishing a sound foundation in mathematics, all students are required to satisfy the Algebra requirement by the time they have completed 30 credits in enrollment.

Quantitative and Formal Reasoning (3 credits)

All students are required to take and pass with a grade of C- or better at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic.

A C- or better is needed in a course that satisfies this requirement. Students who qualify for placement in an upper-level course in mathematics on a proficiency placement test are exempt.

Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study, if available. Diversity courses may also be courses that fulfill other General Education Requirements. (3 credits if not overlapped with another General Education course)

Language/Communication (6-10 credits)

All students are required to take a sequence of two courses that provide them with advanced study of a second language other than English, or the ability to develop their skills in oral and professional communication. Students choose one of the following options below:

Option 1: A Sequence of Two Courses in a Second Language (6-10 credits)

Students complete with a grade of C- or better two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
2. Passing a special proficiency examination;
3. Transferring credits for two terms or more of approved university-level instruction in a second language with grades of C or better;
4. Having a native language other than English.

Option 2: A Sequence of Two Courses in Oral and Professional Communication (6 credits)

These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

Humanities and Arts, Social Sciences, and Natural Sciences (27 credits)

Each student is required to take nine courses in the humanities, social sciences, and natural sciences as distributed below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

One course in Literature (3 credits)

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

One course in Creative Work (3 credits)

In this course, students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theater, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

One course in Philosophical Thinking or Ethics (3 credits)

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

One course in Social Sciences (3 credits)

A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

One course in Historical Analysis (3 credits)

In this course, students will develop skills and methods by which to understand significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.

Three courses in the Natural Sciences (9 credits)

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

One course in Cross-Cultural Awareness (3 credits)

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
- Diversity courses are allowed to overlap with other general education requirements.
- Writing ('W') courses are allowed to overlap with other general education requirements except for the Professional Communication requirement.
- Students may overlap the second course in their language sequence, taken at the college level, with the Geographic Region requirement, except for American Sign Language. This does not apply to students who satisfy the Language requirement through high school study, a proficiency examination, or native proficiency.

Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors offer a combination of face-to-face and online courses.

- Administration of justice
- Dental hygiene (for licensed dental hygienists)
- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Health Services, BS

The Bachelor of Science in Health Services is an interdisciplinary degree completion program designed for allied health professionals who have already received their technical education and licensure in diagnostic medical sonography, radiological technology or respiratory therapy and for community college graduates who have already completed a designated allied health profession associate degree. The core of this flexible program provides students with communication and management skills as well as broadening students' understanding of health-related issues.

Requirements

Students must earn a minimum of 120 credits to complete the Bachelor of Science degree with a major in health services. Of this total, the degree consists of 12 credits of required health services courses and up to 24 credits of professional courses, with the remainder consisting of general education courses and electives.

Note: Licensed diagnostic medical sonographers, radiological technologists, and respiratory therapists, or those who've earned an associate's degree in an approved allied health profession, will be awarded 24 professional education credits. Credits earned at other colleges or universities will be evaluated for transfer. Please check with an academic advisor for specifics related to your associate's degree program.

Health Service Courses: 12 credits

A minimum of 12 credits, or four courses, are required as follows:

A. Health Field: 6 credits

Students choose two courses from the following list:

- NUR 1765 - RISK FACTORS AND HEALTH
- PHIL 1360 - BIOMEDICAL ETHICS
- PSY 1215 - HEALTH PSYCHOLOGY
- SOC 0477 - MEDICAL SOCIOLOGY
- SOC 1450 - HEALTH AND ILLNESS

B. Administration/Management Field: 3 Credits

Students choose one course from the following list:

- BUSERV 1915 - INTRODUCTION TO MANAGEMENT

- HRS 1009 - ORGANIZATIONAL THEORY & BEHAVIOR or BUSORG 1020 - ORGANIZATIONAL BEHAVIOR or COMMRC 1102 - ORGANIZATIONAL COMMUNICATION or PSY 1635 ORGANIZATIONAL PSYCHOLOGY
- PUBSRV 1100 - PRACTICES IN PUBLIC ADMINISTRATION
- PUBSRV 1120 - HUMAN RESOURCES MANAGEMENT IN THE PUBLIC SECTOR
- PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT
- PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS

C. Related Field: 3 credits

Students choose one additional course from the Health Field or Administration/Management Field lists above or else from the list below:

- ANTH 1726 - GLOBAL PHARMACEUTICALS
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION
- HRS 1006 - INTRO TO HUMAN NUTRITION
- PSY 1255 - PRINCIPLES OF BEHAVIOR MODIFICATION
- PSYED 1001 - INTRO EDUCATIONAL PSYCHOLOGY
- HIST 1706 - DRUGS IN GLOBAL HISTORY

Notes

Requirements are subject to change. Many courses are available in an online format. Check with an academic advisor for course availability and additional elective options before registering.

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

General Education Requirements (GERs) provide you with an opportunity to discover interests you never knew you had, all while earning credits toward graduation. And, no matter what your future holds, be it a career or grad school, GERs prepare you by emphasizing skills employers want (like critical thinking, problem solving, written and oral communication) and giving you the opportunity to become more aware of our increasingly diverse and interconnected world.

The College of General Studies provides a liberal arts and pre-professional education for undergraduate students that is grounded in scholarly excellence. Pitt offers you the knowledge, understanding, analytical tools, and communication skills you need to become perceptive, reflective, and intellectually self-conscious citizens within a diverse and rapidly changing world. GERs are at the core of our education.

Our **General Education Requirements changed for students entering as of Fall 2018 (2191) term**. See the CGS General Education Requirements for Fall 2018 and afterward here or visit the CGS General Education Requirements website.

Writing (9 credits)

Written communication is central to almost all disciplines and professions. Developing written proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment.

Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

Students are exempt from having to take Algebra with a 620 SAT Math or 27 ACT Math. Students who do not meet these criteria must earn a C- or higher in MATH 0020, MATH 0025, MATH 0031, CS 0004, or CS 0007. Given the importance of establishing a sound foundation in mathematics, all students are required to satisfy the Algebra requirement by the time they have completed 30 credits in enrollment.

Quantitative and Formal Reasoning (3 credits)

All students are required to take and pass with a grade of C- or better at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic.

A C- or better is needed in a course that satisfies this requirement. Students who qualify for placement in an upper-level course in mathematics on a proficiency placement test are exempt.

Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study, if available. Diversity courses may also be courses that fulfill other General Education Requirements. (3 credits if not overlapped with another General Education course)

Language/Communication (6-10 credits)

All students are required to take a sequence of two courses that provide them with advanced study of a second language other than English, or the ability to develop their skills in oral and professional communication. Students choose one of the following options below:

Option 1: A Sequence of Two Courses in a Second Language (6-10 credits)

Students complete with a grade of C- or better two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
2. Passing a special proficiency examination;
3. Transferring credits for two terms or more of approved university-level instruction in a second language with grades of C or better;
4. Having a native language other than English.

Option 2: A Sequence of Two Courses in Oral and Professional Communication (6 credits)

These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

Humanities and Arts, Social Sciences, and Natural Sciences (27 credits)

Each student is required to take nine courses in the humanities, social sciences, and natural sciences as distributed below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

One course in Literature (3 credits)

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

One course in Creative Work (3 credits)

In this course, students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theater, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

One course in Philosophical Thinking or Ethics (3 credits)

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

One course in Social Sciences (3 credits)

A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

One course in Historical Analysis (3 credits)

In this course, students will develop skills and methods by which to understand significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.

Three courses in the Natural Sciences (9 credits)

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

One course in Cross-Cultural Awareness (3 credits)

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
- Diversity courses are allowed to overlap with other general education requirements.
- Writing ('W') courses are allowed to overlap with other general education requirements except for the Professional Communication requirement.
- Students may overlap the second course in their language sequence, taken at the college level, with the Geographic Region requirement, except for American Sign Language. This does not apply to students who satisfy the Language requirement through high school study, a proficiency examination, or native proficiency.

Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors offer a combination of face-to-face and online courses.

- Administration of justice
- Dental hygiene (for licensed dental hygienists)
- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Humanities, BA

The CGS Humanities BA is being phased out as of Fall 2020, with no new students admitted after September 4, 2020. Inactive students will be able to re-enroll in this major no later than Spring 2023. All students enrolled in the program must complete their degrees by Fall 2028.

Humanities is a liberal arts major with a focus on courses from three humanities departments. This major can be customized to meet your interests and personal or career goals. You will choose to concentrate in three areas from the list below and have the opportunity to take a variety of courses within those areas of study.

Humanities degree graduates have a variety of skills that make them attractive to prospective employers. Career fields pursued by humanities graduates include the following:

- Acting and drama
- College administration
- Event planning
- Human resources
- Politics
- Teaching
- Publishing
- Journalism
- Marketing and advertising
- Public relations
- Insurance
- Real estate
- Social work

- Occupational therapy
- Travel and tourism

Requirements

Students must earn a minimum of 120 credits for the Bachelor of Arts degree with a major in humanities. Of this total, students must take a minimum of 36 credits (approximately 12 courses) according to the specifications below. The remaining credits required for the degree are outlined in the *General Education Requirements* section on this page.

Standard Option

Choose a minimum of 36 credits (approximately 12 courses) from any three departments/programs below. All courses taken must be humanities related.

- Africana Studies (courses must be humanities related)
- Classics
- Communication
- English Composition (0300 and above)
- Film Studies
- English Literature
- English Writing
- Foreign language departments (literature and culture courses)
- History of Art and Architecture
- Music
- Philosophy
- Religious Studies (courses must be humanities related)
- Studio Arts
- Theatre Arts

Notes

- At least five courses must be taken from one department, and at least three courses must be taken from each of the two other departments.
- At least half of the courses taken for the major must be upper-division (1000-level) courses.
- All courses selected for the humanities major must be approved by an academic advisor.

Requirements are subject to change. Check with an academic advisor before registering.

An internship program is available through the College of General Studies. Please see an advisor for additional information.

Pre-Education Options

The College of General Studies and the Pitt School of Education have collaborated on a curriculum within the humanities major that incorporates all of the prerequisite course work needed for admission into the certificate program in comprehensive English education. This option may be used by students interested in the Master of Arts in Teaching (MAT) or Professional Year (PY) programs offered in the School of Education. Completion of the prerequisites for the School of Education does not guarantee acceptance to its programs.

Students pursuing this track take a wide variety of English courses in literature, writing/composition, and literary/film/media theory, in addition to a required foundations course in special education, for a total of 36 credits (approximately 12 courses). At least half of these courses must be at the 1000 level. Students are also encouraged to participate in an internship during their degree program and may fulfill some CGS general education and major requirements by completing a study abroad program. See a CGS advisor for more information.

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

General Education Requirements (GERs) provide you with an opportunity to discover interests you never knew you had, all while earning credits toward graduation. And, no matter what your future holds, be it a career or grad school, GERs prepare you by emphasizing skills employers want

(like critical thinking, problem solving, written and oral communication) and giving you the opportunity to become more aware of our increasingly diverse and interconnected world.

The College of General Studies provides a liberal arts and pre-professional education for undergraduate students that is grounded in scholarly excellence. Pitt offers you the knowledge, understanding, analytical tools, and communication skills you need to become perceptive, reflective, and intellectually self-conscious citizens within a diverse and rapidly changing world. GERs are at the core of our education.

Our **General Education Requirements changed for students entering as of Fall 2018 (2191) term**. See the CGS General Education Requirements for Fall 2018 and afterward here or visit the CGS General Education Requirements website.

Writing (9 credits)

Written communication is central to almost all disciplines and professions. Developing written proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment.

Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

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These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

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One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

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Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

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This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
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Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors offer a combination of face-to-face and online courses.

- Administration of justice
- Dental hygiene (for licensed dental hygienists)
- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Legal Studies, BA

The Legal Studies major is an interdisciplinary course of study that combines the theories and methods of several social science disciplines and law. While not designed as a prelaw program, the major seeks to develop an understanding of the nature, content, and operation of American law and legal institutions.

Career Opportunities

Courses in legal studies provide a background for graduate work in administration of justice, business, legal studies, and law as well as work in law-related fields like insurance, social security, and social services. The courses help prepare students for careers in the following settings:

- banking
- children's rights
- civil liberties organizations
- collective bargaining/labor relations
- corporate sales divisions
- credit-related agencies
- judicial administration
- legal research
- human resources
- planning commissions
- privacy protection
- public government aid/legislation
- public welfare
- real estate agencies
- tax consultation firms
- workers' compensation bureaus

Major Requirements

Students must earn a minimum of 120 credits for the Bachelor of Arts degree with a major in legal studies. Of this total, 30 credits make up the major, which is satisfied by taking courses to complete the core requirements, legal studies electives, and outside electives. Below is an outline of these major course requirements. The remaining credits required for the degree are outlined in the General Education Requirements section on this page. Some legal studies courses fulfill the College of General Studies social sciences curriculum requirements. See the current time schedule of classes for specific information.

Core Requirements: 6 credits (two courses)

- LEGLST 0080 - INTRODUCTION TO LEGAL STUDIES
  Choose one of the following:
- LEGLST 1210 - LAW AND POLITICS or
- PS 1213 - LAW AND POLITICS (Political Science)

Legal Studies Electives: 18 credits (choose six courses)

- ADMJ 1225 - THE JUVENILE JUSTICE PROCESS
- ADMJ 1900 - PRESERVICE INTERNSHIP
- LEGLST 0020 - PUBLIC LAW AND MORAL REASONING
- LEGLST 1140 - INTRODUCTION TO CRIMINAL LAW
- LEGLST 1141 - INTRODUCTION TO CRIMINAL PROCEDURE
- LEGLST 1150 - LAWYERS AND LEGAL PROFESSION
- LEGLST 1152 - LEGAL ISSUES IN PUBLIC SERVICE
- LEGLST 1155 - LAW AND SOCIAL CHANGE
- LEGLST 1230 - PSYCHOLOGY AND LAW
- LEGLST 1260 - LAW, LITERATURE, AND CINEMA
- LEGLST 1315 - SEX, LAW AND MARRIAGE

- LEGLST 1318 - SEPARATION, DIVORCE AND CUSTODY
- LEGLST 1320 - LAW AND ENVIRONMENT
- LEGLST 1325 - CONSUMER LAW
- LEGLST 1327 - INTERNATIONAL LAW
- LEGLST 1340 - INTRODUCTION TO CIVIL RIGHTS
- LEGLST 1355 - EMERGING ISSUES IN LEGAL AND SOCIAL POLICY
- LEGLST 1410 - INTRODUCTION TO LEGAL RESEARCH
- LEGLST 1901 - INDEPENDENT STUDY

Outside Electives: 6 credits (choose two courses)

The final degree requirement is completion of 6 credits (two courses) from a list of approved electives outside legal studies. The following represents approved elective courses from various disciplines:

Administration of Justice

- ADMJ 0100 - SOCIETY AND THE LAW
- ADMJ 0500 - INTRODUCTION TO ADMINISTRATION OF JUSTICE
- ADMJ 1220 - DEVIANCE AND THE LAW
- ADMJ 1238 - CYBER SECURITY, LAW, AND MONEY LAUNDERING
- ADMJ 1450 - CRITICAL ISSUES IN CRIMINAL JUSTICE

Communication

- COMMRC 1114 - FREEDOM OF SPEECH AND PRESS

English Composition

- ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS

History

- HIST 1062 - HUMAN RIGHTS IN WORLD HISTORY
- HIST 1190 - MEDIEVAL GOVERNMENT AND SOCIETY
- HIST 1191 - ENGLISH ORIGINS OF AMERICAN LAW

Political Science

- PS 1201 - CONSTITUTION AND CIVIL LIBERTIES
- PS 1202 - AMERICAN CONSTITUTIONAL LAW
- PS 1211 - LEGISLATIVE PROCESS
- PS 1261 - AMERICAN PUBLIC POLICY
- PS 1614 - THEORIES OF JUSTICE (Honors)
- PS 1675 - POLITICS OF HUMAN RIGHTS

Psychology

- PSY 0182 - LAW AND SOCIAL PSYCHOLOGY

Public Service

- PUBSRV 1305 - HEALTH, LAW AND ETHICS
- PUBSRV 1455 - LAW, ETHICS AND PUBLIC POLICY IN THE MASS MEDIA

Sociology

- SOC 0471 - DEVIANCE AND SOCIAL CONTROL

Urban Studies

- URBNST 0400 - CRIME, PUNISHMENT, JUSTICE, REINTEGRATION
- URBNST 1612 - SOCIAL JUSTICE AND THE CITY

Pitt Prison Education Project Courses

- Any Pitt Prison Education Project (PEEP) course (codes vary)

Notes

Students interested in a minor, rather than a major, in legal studies should check with their academic advisor.

Requirements are subject to change. Check with an academic advisor before registering.

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

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Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially

revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

Students are exempt from having to take Algebra with a 620 SAT Math or 27 ACT Math. Students who do not meet these criteria must earn a C- or higher in MATH 0020, MATH 0025, MATH 0031, CS 0004, or CS 0007. Given the importance of establishing a sound foundation in mathematics, all students are required to satisfy the Algebra requirement by the time they have completed 30 credits in enrollment.

Quantitative and Formal Reasoning (3 credits)

All students are required to take and pass with a grade of C- or better at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic.

A C- or better is needed in a course that satisfies this requirement. Students who qualify for placement in an upper-level course in mathematics on a proficiency placement test are exempt.

Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study, if available. Diversity courses may also be courses that fulfill other General Education Requirements. (3 credits if not overlapped with another General Education course)

Language/Communication (6-10 credits)

All students are required to take a sequence of two courses that provide them with advanced study of a second language other than English, or the ability to develop their skills in oral and professional communication. Students choose one of the following options below:

Option 1: A Sequence of Two Courses in a Second Language (6-10 credits)

Students complete with a grade of C- or better two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
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4. Having a native language other than English.

Option 2: A Sequence of Two Courses in Oral and Professional Communication (6 credits)

These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

Humanities and Arts, Social Sciences, and Natural Sciences (27 credits)

Each student is required to take nine courses in the humanities, social sciences, and natural sciences as distributed below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

One course in Literature (3 credits)

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

One course in Creative Work (3 credits)

In this course, students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theater, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

One course in Philosophical Thinking or Ethics (3 credits)

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

One course in Social Sciences (3 credits)

A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

One course in Historical Analysis (3 credits)

In this course, students will develop skills and methods by which to understand significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.

Three courses in the Natural Sciences (9 credits)

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

One course in Cross-Cultural Awareness (3 credits)

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
- Diversity courses are allowed to overlap with other general education requirements.
- Writing ('W') courses are allowed to overlap with other general education requirements except for the Professional Communication requirement.

- Students may overlap the second course in their language sequence, taken at the college level, with the Geographic Region requirement, except for American Sign Language. This does not apply to students who satisfy the Language requirement through high school study, a proficiency examination, or native proficiency.

Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors offer a combination of face-to-face and online courses.

- Administration of justice
- Dental hygiene (for licensed dental hygienists)
- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Media and Professional Communications, BA

This major provides students with a rigorous education in the theories of mass media process, history, and ethics as well as the opportunity to specialize in one of three professional practice areas: corporate and community relations, writing for the professions, or digital media.

The three tracks are designed to strengthen both the knowledge base and proficiencies of students pursuing careers in communication fields, such as print, television, radio, film, new media, and corporate and organizational communications. This program also will benefit students pursuing careers in a variety of industries in which communication with internal and external audiences is critical. Learn more about our featured internship opportunity with Pitt Panther TV, and other internship opportunities, today.

Major Requirements

Students must earn a minimum of 120 credits for the Bachelor of Arts degree with a major in media and professional communications. Of this total, the major consists of 12 credits of prerequisite courses and 24 credits of specialization courses. The remaining credits for the degree are outlined in the General Education Requirements section on this page.

Note: English composition (ENGCMP) courses and writing-intensive courses (officially designated as W courses in the catalog) that are taken for the major must be passed with a grade of C or higher (grades of C- or lower are not acceptable).

Prerequisite Courses (12 credits)

Required for all three tracks.

- COMMRC 0320 - MASS COMMUNICATION PROCESS
- COMMRC 1121 - HISTORY OF MASS MEDIA
- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION
- PUBSRV 1455 - LAW, ETHICS AND PUBLIC POLICY IN THE MASS MEDIA

Specializations (24 credits)

Choose one of the specialization tracks that follow.

TRACK 1: Corporate/Community Relations

Required Courses (9 credits)

- COMMRC 1111 - THEORIES OF PERSUASION
- COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION Public and Media Relations
- BUSERV 1940 - MARKETING FUNDAMENTALS

Note

BUSERV 1940 Marketing Fundamentals may be substituted with BUSMKT 1040 Intro to Marketing.

Electives, choose four (12 credits)

- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION
- COMMRC 1125 - MEDIA THEORY
- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION Health Communication
- COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION Communication and New Media Technologies
- ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS
- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0515 - PERSAUSIVE WRITING IN ADVERTISING
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0550 - TOPICS IN PUBLIC/PROFESSIONAL WRITING
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 0641 - WRITING FOR CHANGE
- ENGCMP 1103 - PUBLIC RELATIONS WRITING
- ENGCMP 1104 - CORPORATE STORYTELLING
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1120 - HISTORY AND ETHICS OF ADVERTISING AND PUBLIC RELATIONS
- ENGCMP 1270 - PROJECTS IN BLACK RHETORIC
- ENGCMP 1400 - GRANT WRITING
- ENGCMP 1401 - WRITING FOR FUNDRAISING AND DEVELOPMENT
- ENGCMP 1420 - WRITING PROPOSALS FOR BUSINESS
- ENGWRT 0550 - FUNDAMENTALS OF NEWS REPORTING
- ENGWRT 0710 - INTRO TO AUDIO STORYTELLING
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA
- PSY 0105 - INTRODUCTION TO SOCIAL PSYCHOLOGY
- PSY 1635 - ORGANIZATIONAL PSYCHOLOGY
- PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT
- PUBSRV 1310 - DIVERSITY ISSUES IN PUBLIC SERVICE
- SOC 0490 - MASS MEDIA

Internship, choose one (3 credits)

- CGS 1900 - CHOOSING YOUR PATH: INTERNSHIP SEMINAR
- THEA 1484 - DIRECTED PROJECT BUSINESS MGT

Track 2: Writing for the Professions

Required Courses (6 credits)

- COMMRC 1114 - FREEDOM OF SPEECH AND PRESS
  and choose one of the following courses:
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION or
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW

Note

COMMRC 1114 may be substituted with either COMMRC 1161 Communication Ethics (3cr.) or, if not used as an elective, ENGCMP 1103 Public Relations Writing (3cr.).

Electives, choose five (15 credits)

- COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION *Public and Media Relations* or *Communication and New Media Technologies*
- ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS
- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0515 - PERSAUSIVE WRITING IN ADVERTISING
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0550 - TOPICS IN PUBLIC/PROFESSIONAL WRITING
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 1103 - PUBLIC RELATIONS WRITING
- ENGCMP 1111 - PROFESSIONAL WRITING IN GLOBAL CONTEXTS
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1400 - GRANT WRITING
- ENGCMP 1401 - WRITING FOR FUNDRAISING AND DEVELOPMENT
- ENGCMP 1420 - WRITING PROPOSALS FOR BUSINESS
- ENGWRT 0550 - FUNDAMENTALS OF NEWS REPORTING
- ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE
- ENGWRT 1391 - WRITING THE REVIEW
- ENGWRT 1393 - SPORTS WRITING
- ENGWRT 1399 - TOPICS IN NON-FICTION: NEWSPAPER
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA

Internship, choose one (3 credits)

- CGS 1900 - CHOOSING YOUR PATH: INTERNSHIP SEMINAR (section 7710)
- ENGWRT 1370 - JOURNALISM BOOT CAMP: WRITE NOW

Track 3: Digital Media

Required Courses (9 credits)

- COMMRC 1122 - MEDIA CRITICISM
- ENGFLM 0355 - VISUAL LITERACY or ENGFLM 0401 - INTRODUCTION TO VISUAL CULTURE
- FILMST 0001 - FILMMAKING 1: FUNDAMENTALS (cross-listed with FMST 0800)

Electives, choose four (12 credits)

- COMMRC 1105 - TELEVISION AND SOCIETY
- COMMRC 1125 - MEDIA THEORY
- COMMRC 1126 - MEDIA AND CONSUMER CULTURE
- CS 0134 - WEB SITE DESIGN AND DEVELOPMENT
- ENGCMP 0425 - DIGITAL HUMANITY (cross-listed with HAA 0425)
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION
- ENGCMP 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN
- ENGFLM 0400 - INTRODUCTION TO FILM
- ENGFLM 1390 - CONTEMPORARY FILM
- ENGFLM 1485 - FILM AND POLITICS
- ENGFLM 1683 - DOCUMENTARY FILM
- ENGFLM 1695 - HORROR FILM
- ENGLIT 0354 - WORDS AND IMAGES
- ENGLIT 0550 - INTRODUCTION TO POPULAR CULTURE
- ENGWRT 0650 - READINGS IN JOURNALISM
- ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE
- FILMST 0120 - PHOTOGRAPHY 1
- FILMST 0121 - ANIMATION 1
- FILMST 0250 - BUSINESS OF PHOTOGRAPHY AND MULTIMEDIA
- FILMST 0400 - POST-PRODUCTION
- FILMST 0430 - AUDIO PRODUCTION
- FILMST 0601 - FILMMAKING 2: SIGHT AND SOUND
- FILMST 0610 - DIGITAL EFFECTS 1
- FILMST 1001 - BROADCASTING
- FILMST 1132 - ELEMENTS OF SCREENWRITING
- FILMST 1600 - FILMMAKING 3: STORY TO SCREEN
- HAA 0090 - INTRODUCTION TO CONTEMPORARY ART
- HAA 0470 - PHOTOGRAPHY AND ART
- PS 1836 - POLITICS THROUGH FILM
- PSY 1080 - PSYCHOLOGY AND THE MEDIA
- SA 0110 - VISUAL THINKING
- SA 0130 - DRAWING STUDIO 1
- SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1
- SA 1270 - DIGITAL STUDIO: IMAGING
- SOC 0490 - MASS MEDIA

Internship (3 credits)

- CGS 1900 - CHOOSING YOUR PATH: INTERNSHIP SEMINAR (section: 7710)

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

General Education Requirements (GERs) provide you with an opportunity to discover interests you never knew you had, all while earning credits toward graduation. And, no matter what your future holds, be it a career or grad school, GERs prepare you by emphasizing skills employers want (like critical thinking, problem solving, written and oral communication) and giving you the opportunity to become more aware of our increasingly diverse and interconnected world.

The College of General Studies provides a liberal arts and pre-professional education for undergraduate students that is grounded in scholarly excellence. Pitt offers you the knowledge, understanding, analytical tools, and communication skills you need to become perceptive, reflective, and intellectually self-conscious citizens within a diverse and rapidly changing world. GERs are at the core of our education.

Our **General Education Requirements changed for students entering as of Fall 2018 (2191) term**. See the CGS General Education Requirements for Fall 2018 and afterward here or visit the CGS General Education Requirements website.

Writing (9 credits)

Written communication is central to almost all disciplines and professions. Developing written proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment.

Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

Students are exempt from having to take Algebra with a 620 SAT Math or 27 ACT Math. Students who do not meet these criteria must earn a C- or higher in MATH 0020, MATH 0025, MATH 0031, CS 0004, or CS 0007. Given the importance of establishing a sound foundation in mathematics, all students are required to satisfy the Algebra requirement by the time they have completed 30 credits in enrollment.

Quantitative and Formal Reasoning (3 credits)

All students are required to take and pass with a grade of C- or better at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic.

A C- or better is needed in a course that satisfies this requirement. Students who qualify for placement in an upper-level course in mathematics on a proficiency placement test are exempt.

Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study, if available. Diversity courses may also be courses that fulfill other General Education Requirements. (3 credits if not overlapped with another General Education course)

Language/Communication (6-10 credits)

All students are required to take a sequence of two courses that provide them with advanced study of a second language other than English, or the ability to develop their skills in oral and professional communication. Students choose one of the following options below:

Option 1: A Sequence of Two Courses in a Second Language (6-10 credits)

Students complete with a grade of C- or better two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
2. Passing a special proficiency examination;
3. Transferring credits for two terms or more of approved university-level instruction in a second language with grades of C or better;
4. Having a native language other than English.

Option 2: A Sequence of Two Courses in Oral and Professional Communication (6 credits)

These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

Humanities and Arts, Social Sciences, and Natural Sciences (27 credits)

Each student is required to take nine courses in the humanities, social sciences, and natural sciences as distributed below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

One course in Literature (3 credits)

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

One course in Creative Work (3 credits)

In this course, students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theater, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

One course in Philosophical Thinking or Ethics (3 credits)

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

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A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

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Three courses in the Natural Sciences (9 credits)

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

One course in Cross-Cultural Awareness (3 credits)

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
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- Writing ('W') courses are allowed to overlap with other general education requirements except for the Professional Communication requirement.
- Students may overlap the second course in their language sequence, taken at the college level, with the Geographic Region requirement, except for American Sign Language. This does not apply to students who satisfy the Language requirement through high school study, a proficiency examination, or native proficiency.

Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

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- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Natural Sciences, BS

The natural sciences major is a liberal arts major with a focus on courses from multiple natural sciences departments. Students customize this major to meet their interests and personal or career goals, choosing from a variety of courses with a concentration in areas, such as anthropology, biological sciences, chemistry, computer science, geology and planetary science, history and philosophy of science, mathematics, neuroscience, physics, psychology, and statistics.

Also available are a pre-medicine option (for those preparing for medical school or another health professional school); a pre-physician assistant option (for those preparing to apply to Physician Assistant education programs), and two pre-education options (for those preparing for teaching careers).

Important: New eligibility requirements are now in place for students applying to the CGS Natural Sciences major (Standard/Multidisciplinary and Pre-Education tracks) for the Spring 2020 term and beyond.

Starting with the Spring 2020 term (January 1, 2020), all new students declaring the Standard/Multidisciplinary and Pre-Education tracks in the Natural Sciences major will need to have an overall GPA minimum of 3.25 to be eligible for admission. This 3.25 overall GPA minimum is required at the time of application to the program.

In Spring 2018, CGS implemented a minimum overall GPA requirement of 3.50 for students at time of application in the Pre-Medicine and Pre-Physician Assistant tracks. These minimums are still in effect.

Natural Sciences Standard (Multi-Disciplinary) Major (36 credits)

Choose a minimum of 36 credits (approximately 11-12 courses, not including labs) from two to four departments below. All courses taken must be related to natural sciences and selected in consultation with your CGS advisor. At least five courses must be taken from one department, which provides a disciplinary base. The other courses should be selected based on your professional and academic goals and approved by your academic advisor.

- Anthropology (natural sciences-related course)
- Astronomy
- Biological Sciences
- Chemistry
- Computer science (only courses numbered 0401 and above)
- Geology and planetary science
- History and philosophy of science (natural sciences-related course)
- Mathematics (only courses numbered 0220 and above)
- Neuroscience
- Physics
- Psychology
- Statistics (0200 or 1000, and courses numbered above 1000)

Students admitted under the new eligibility requirements for Spring 2020 must have an overall 3.25 GPA at time of admission into this track.

Pre-Medicine Option (39 credits)

This natural sciences concentration incorporates the course work needed for admission to most medical and dental programs. Completion of this concentration does not guarantee acceptance into graduate study. Students pursuing this option can take advantage of the resources of the University of Pittsburgh's Interprofessional Center for Health Careers (PIC Health Careers) Night sections of biology, chemistry, and physics courses are available, with seats reserved specifically for CGS students.

Students must have a 3.50 GPA to be admitted into the Pre-Medicine(/Pre-PA) track in the Natural Sciences major.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1 (effective for Fall 2019: BIOSC 0057 FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1 or BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1)
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2 or
- BIOSC 1000 - BIOCHEMISTRY
- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 0345 - ORGANIC LABORATORY
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1 or STAT 1000 - APPLIED STATISTICAL METHODS
- PHYS 0110 - INTRODUCTION TO PHYSICS 1
- PHYS 0111 - INTRODUCTION TO PHYSICS 2
- PHYS 0212 - INTRODUCTION TO LABORATORY PHYSICS
  Additional recommended courses for premedicine option:

- *MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1 or STAT 1000 - APPLIED STATISTICAL METHODS (choose the course that you did not take as part of your requirements)
- BIOSC 1850 - MICROBIOLOGY
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- NROSCI 1000 - INTRO TO NEUROSCIENCE
- NROSCI 1250 - HUMAN PHYSIOLOGY

Notes

Requirements can vary from school to school. To ensure meeting eligibility criteria, one year of English (writing intensive) and one half year of Psychology and/or Sociology are also recommended. Consult the websites of the medical schools to which you plan to apply for their specific requirements.

Pre-Physician Assistant Option (min. 40 credits)

The pre-PA curriculum is designed for students who are interested in the Physician Assistant Studies Program at the University of Pittsburgh School of Health & Rehabilitation Sciences (SHRS). The pre-PA option incorporates the prerequisite course work necessary for the application. Completion of the pre-PA plan does not guarantee admission. For a full list of admission requirements, visit the School of Health and Rehabilitation Sciences PA program website. Note: Requirements for other PA programs from schools other than the University of Pittsburgh may differ. Please consult their respective websites for specific admission requirements.

Students must have a 3.50 GPA to be admitted into the Pre-Medicine(/Pre-PA) track in the Natural Sciences major.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1 (effective Fall 2019: BIOSC 0057 FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1 or BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1)
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2 or BIOSC 0068 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 2
- BIOSC 1850 - MICROBIOLOGY
- BIOSC 1855 - INTRODUCTION TO MICROBIOLOGY LABORATORY
- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- CHEM 0310 - ORGANIC CHEMISTRY 1 or CHEM 0350 - PRINCIPLES OF ORGANIC CHEMISTRY
- CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1
  or CHEM 0345 - ORGANIC LABORATORY
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1
- NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1
- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2
- NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2
- PSY 0010 - INTRODUCTION TO PSYCHOLOGY
- PSY Upper-Level Elective Course
- STAT 0200 - BASIC APPLIED STATISTICS *or* STAT 1000 - APPLIED STATISTICAL METHODS *or* PSY 0310 - DEVELOPMENTAL PSYCHOLOGY
- Outside Major: Other Requirements
- REHSCI 1235 - MEDICAL TERMINOLOGY
- HRS 1006 - INTRO TO HUMAN NUTRITION

Notes

If you are seeking to apply to the University of Pittsburgh's SHRS program, the school will accept NUR 0031 Microbiology and NUR 0032 (Lab) in place of BIOSC 1850 Microbiology and BIOSC 1855 (Lab). You will also need a statistics course and a medical terminology course. See additional requirements outside the major.

Pre-Education Options

The College of General Studies and the Pitt School of Education have collaborated on two concentrations in the natural sciences major that incorporate the prerequisite science course work needed for admission into the certificate programs in earth and space science and general science.

These options may be used by students interested in Science Education - Master of Arts in Teaching offered in the School of Education. Completion of the prerequisite requirements does not guarantee admission. Note: The School of Education also recommends at least a 3.0 cumulative undergraduate GPA for all of their teacher certificate programs. Please consult their Admissions page for program-specific requirements.

Students must have a 3.25 GPA to be admitted under the new eligibility requirements for this track beginning in Spring 2020.

Earth and Space Science Concentration (45 credits)

- ASTRON 0089 - STARS, GALAXIES AND THE COSMOS
- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- GEOL 1030 - THE ATMOSPHERE, OCEANS AND CLIMATE or GEOL 0890 - OCEANOGRAPHY
- GEOL 0055 - GEOLOGY LABORATORY
- GEOL 0060 - HISTORY OF THE EARTH or GEOL 1020 - SEDIMENTOLOGY AND STRATIGRAPHY
- GEOL 0800 - GEOLOGY
- GEOL 0840 - ENVIRONMENTAL SCIENCE
- GEOL 0860 - ENVIRONMENTAL GEOLOGY
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- PHYS 0110 - INTRODUCTION TO PHYSICS 1
- IL 1580 - FOUNDATIONS OF SPECIAL EDUC
- Science Electives

General Science Concentration (46 credits)

- ASTRON 0089 - STARS, GALAXIES AND THE COSMOS
- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1 (new course number and title effective Fall 2019: BIOSC 0057 FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1 or BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1)
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2
  or BIOSC 0068 FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 2
- BIOSC 0370 - ECOLOGY
- BIOSC 1000 - BIOCHEMISTRY or BIOSC 1850 - MICROBIOLOGY
  Note that CHEM 0310 is a prerequisite course for BIOSC 1000.
- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- CHEM 0310 - ORGANIC CHEMISTRY 1
- GEOL 0800 - GEOLOGY or GEOL 0860 - ENVIRONMENTAL GEOLOGY
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- PHYS 0110 - INTRODUCTION TO PHYSICS 1
- PHYS 0111 - INTRODUCTION TO PHYSICS 2
- PHYS 0212 - INTRODUCTION TO LABORATORY PHYSICS
- IL 1580 - FOUNDATIONS OF SPECIAL EDUC

Notes

Requirements are subject to change. Check with an academic advisor before registering.

An internship program is available through the College of General Studies. Please see your advisor for additional information.

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

General Education Requirements (GERs) provide you with an opportunity to discover interests you never knew you had, all while earning credits toward graduation. And, no matter what your future holds, be it a career or grad school, GERs prepare you by emphasizing skills employers want (like critical thinking, problem solving, written and oral communication) and giving you the opportunity to become more aware of our increasingly diverse and interconnected world.

The College of General Studies provides a liberal arts and pre-professional education for undergraduate students that is grounded in scholarly excellence. Pitt offers you the knowledge, understanding, analytical tools, and communication skills you need to become perceptive, reflective, and intellectually self-conscious citizens within a diverse and rapidly changing world. GERs are at the core of our education.

Our **General Education Requirements changed for students entering as of Fall 2018 (2191) term**. See the CGS General Education Requirements for Fall 2018 and afterward here or visit the CGS General Education Requirements website.

Writing (9 credits)

Written communication is central to almost all disciplines and professions. Developing written proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment.

Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

Students are exempt from having to take Algebra with a 620 SAT Math or 27 ACT Math. Students who do not meet these criteria must earn a C- or higher in MATH 0020, MATH 0025, MATH 0031, CS 0004, or CS 0007. Given the importance of establishing a sound foundation in mathematics, all students are required to satisfy the Algebra requirement by the time they have completed 30 credits in enrollment.

Quantitative and Formal Reasoning (3 credits)

All students are required to take and pass with a grade of C- or better at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic.

A C- or better is needed in a course that satisfies this requirement. Students who qualify for placement in an upper-level course in mathematics on a proficiency placement test are exempt.

Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study, if available. Diversity courses may also be courses that fulfill other General Education Requirements. (3 credits if not overlapped with another General Education course)

Language/Communication (6-10 credits)

All students are required to take a sequence of two courses that provide them with advanced study of a second language other than English, or the ability to develop their skills in oral and professional communication. Students choose one of the following options below:

Option 1: A Sequence of Two Courses in a Second Language (6-10 credits)

Students complete with a grade of C- or better two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
2. Passing a special proficiency examination;
3. Transferring credits for two terms or more of approved university-level instruction in a second language with grades of C or better;
4. Having a native language other than English.

Option 2: A Sequence of Two Courses in Oral and Professional Communication (6 credits)

These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

Humanities and Arts, Social Sciences, and Natural Sciences (27 credits)

Each student is required to take nine courses in the humanities, social sciences, and natural sciences as distributed below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

One course in Literature (3 credits)

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

One course in Creative Work (3 credits)

In this course, students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theater, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

One course in Philosophical Thinking or Ethics (3 credits)

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

One course in Social Sciences (3 credits)

A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

One course in Historical Analysis (3 credits)

In this course, students will develop skills and methods by which to understand significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.

Three courses in the Natural Sciences (9 credits)

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

One course in Cross-Cultural Awareness (3 credits)

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
- Diversity courses are allowed to overlap with other general education requirements.
- Writing ('W') courses are allowed to overlap with other general education requirements except for the Professional Communication requirement.
- Students may overlap the second course in their language sequence, taken at the college level, with the Geographic Region requirement, except for American Sign Language. This does not apply to students who satisfy the Language requirement through high school study, a proficiency examination, or native proficiency.

Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors offer a combination of face-to-face and online courses.

- Administration of justice
- Dental hygiene (for licensed dental hygienists)
- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Public Service, BA

The undergraduate major in public service is offered in partnership with the Pitt Graduate School of Public and International Affairs. It is designed to prepare students for a broad range of careers that are focused on the resolution of public problems or the delivery of public services. These careers range from those in the local government and community arena to the metropolitan region and state arena to national and international settings. Potential employers include local, state, and federal governments; nonprofit and nongovernmental organizations at the local, regional, national, and international level; private firms engaged in working with governments; and private corporations with an active public service culture.

The major serves students who are interested in public issues as concerned and interested citizens and prepares them for a wide range of graduate programs related to public policy and management.

Major Requirements

Students must complete a minimum of 120 credits for the Bachelor of Arts degree with a major in public service. Of this total, students must take:

- 33 credits (11 courses) in public service;
- one (1) course in statistics(STAT 0200 - BASIC APPLIED STATISTICS, STAT 0800 or STAT 1000); and
- six (6) credits (two courses) in a related field such as political science, economics, psychology, sociology, or another field approved by an academic advisor. The remaining credits required for the degree are outlined in the General Education Requirements section on this page.

Core Courses (15 credits)

- PUBSRV 0020 - INTRODUCTION TO PUBLIC SERVICE
- PUBSRV 0030 - PUBLIC POLICY PROCESS
- PUBSRV 0040 - PUBLIC SERVICE TECHNOLOGIES
- PUBSRV 0050 - ETHICS AND ACCOUNTABILITY
- PUBSRV 1900 - INTERNSHIP SEMINAR

Concentration Areas (18 credits)

Choose one of the three concentration areas below:

Public Administration Concentration

- PUBSRV 1100 - PRACTICES IN PUBLIC ADMINISTRATION
- PUBSRV 1110 - FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR
- PUBSRV 1120 - HUMAN RESOURCES MANAGEMENT IN THE PUBLIC SECTOR
- PUBSRV 1130 - PLANNING IN THE PUBLIC SECTOR
- PUBSRV - Electives (choose two additional public service courses)

Nonprofit Management Concentration

- PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT
- PUBSRV 1210 - FINANCIAL MANAGEMENT OF NON-PROFIT ORGANIZATIONS
- PUBSRV 1220 - HUMAN RESOURCE MANAGEMENT OF NON-PROFIT ORGANIZATIONS
- PUBSRV 1230 - FUNDRAISING FOR NON-PROFIT ORGANIZATIONS
- PUBSRV - Electives (choose two additional public service courses)

Note

The following courses may substitute for each other in the event of course scheduling conflicts or unavailability: PUBSRV 1110 and PUBSRV 1210 | PUBSRV 1120 and PUBSRV 1220

Self-Designed Concentration

Courses that meet the special program needs of the student may be selected from the courses offered in public service or in a related area or department. A written plan for completing the self-designed concentration must be approved by the College of General Studies Academic Affairs Committee. The proposed plan of studies should be unique and not offered at Pitt in another facet such as another major, certificate or minor.

Public Service Electives

Public administration concentration students may use the 1200-numbered courses as electives; nonprofit management concentration students may use 1100-numbered courses. Courses designated (UHC) are offered in conjunction with the University Honors College.

- PUBSRV 1300 - LEGAL ISSUES IN PUBLIC SERVICE
- PUBSRV 1305 - HEALTH, LAW AND ETHICS
- PUBSRV 1310 - DIVERSITY ISSUES IN PUBLIC SERVICE
- PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS
- PUBSRV 1320 - GEOGRAPHIC INFORMATION SYSTEMS IN THE PUBLIC SERVICE
- PUBSRV 1340 - STRATEGIC PLANNING PUBLIC SECTOR
- PUBSRV 1390 - THEORIES OF LEADERSHIP
- PUBSRV 1425 - PRINCIPLES OF HOMELAND SECURITY
- PUBSRV 1430 - TRIAL ADVOCACY 1 (honors)
- PUBSRV 1435 - TRIAL ADVOCACY 2 (honors)
- PUBSRV 1455 - LAW, ETHICS AND PUBLIC POLICY IN THE MASS MEDIA
- PUBSRV 1901 - INDEPENDENT STUDY
- PUBSRV 1910 - INSTITUTE OF POLITICS INTERNSHIP/SEMINAR *PUBSRV 1910 may be used in place of PUBSRV 1900. Check with an academic advisor before registering*

Notes

Five-year accelerated program for Pitt undergraduates

High-achieving University of Pittsburgh juniors (and in some cases, first-term seniors) in the College of General Studies may apply early to the Graduate School of Public and International Affairs (GSPIA). If admitted, they may enroll at GSPIA in what normally would have been their senior year, allowing them to complete both a bachelor's and a master's degree in a total of five years. Special eligibility requirements apply. Pitt undergraduates interested in this program should contact GSPIA at 412-648-7640.

Please note:

This major requires that you complete an internship at a facility external to the University, and this facility may or will require a criminal background check, an Act 33/34 clearance, and perhaps a drug screen to determine whether you are qualified to participate in the internship. Additionally, in order to become licensed or employed, many states will inquire as to whether the applicant has been convicted of a misdemeanor, a felony, or a felonious or illegal act associated with alcohol and/or substance abuse.

Students interested in a minor, rather than a major, in public service should check with their academic advisor.

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General Education Requirements

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Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

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- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Social Sciences, BA

The CGS Social Sciences major is being phased out as of Fall 2020, with no new students admitted after September 4, 2020.

Inactive students will be able to re-enroll in this major no later than Spring 2023. All students enrolled in the program must complete their degrees by Fall 2028.

Social sciences is a liberal arts major with a focus on courses from three social sciences departments. This major can be customized to meet your interests and personal or career goals. You will choose to concentrate in three areas from the list below and have the opportunity to take a variety of courses within those areas of study.

Also available is a pre-education option for those preparing for a teaching career.

Social Sciences Standard Major (36 credits)

Of the minimum total of 120 credits required for the Bachelor of Arts degree with a major in social sciences area, 36 credits (approximately 12 courses) must come in courses that satisfy the major requirements. To satisfy those requirements, students choose social sciences related courses from three of the following departments and programs.

- Africana studies (social sciences-related courses)
- Anthropology (social sciences-related courses)
- Economics
- Gender, Sexuality, and Women's Studies
- History
- Jewish Studies
- Legal Studies
- Political Science
- Psychology (social sciences-related courses)
- Religious Studies (social sciences-related courses)
- Sociology
- Urban Studies

Notes

Students must adhere to the following requirements as they take courses for the social sciences standard major:

- At least five courses must be taken from one department/program listed above and at least three courses from the other two departments/programs.
- At least one half of the major courses must be at the 1000-level.
- All courses selected for the social sciences area major must be approved by an academic advisor.

Pre-Education Option (36 credits)

The College of General Studies and the Pitt School of Education have collaborated on a concentration in the social sciences major that incorporates the prerequisite science course work needed for admission into the certificate program in Social Studies Education. This option may be used by students interested in the Master of Arts in Teaching (MAT) program and Professional Year (PY) Program offered in the School of Education. Completion of the prerequisites for the School of Education does not guarantee acceptance to its programs. Students must complete a minimum of 120 credits (approximately 40 courses) for a Bachelor of Science degree with a major in social sciences. Of this total, students must take a minimum of 36 credits (approximately 12 courses) according to the specifications. At least 18-credit hours must be at the 1000-level. The remaining credits required for the degree are outlined in the General Education Requirements section on this page.

Area 1: History, Geography, Culture (15-18 credits)

Recommended courses: choose one per category.

U.S. History

- HIST 0600 - UNITED STATES TO 1877
- HIST 0601 - UNITED STATES 1865-PRESENT
- HIST 0670 - AFRICAN AMERICAN HISTORY TO 1877
- HIST 0671 - AFRICAN AMERICAN HISTORY SINCE 1865
- HIST 1610 - UNITED STATES COLONIAL
- HIST 1611 - AMERICAN REVOLUTION 1763-1791
- HIST 1619 - UNITED STATES SINCE 1945

Western European History

- HIST 0100 - WESTERN CIVILIZATION 1
- HIST 0101 - WESTERN CIVILIZATION 2

World History (Non-Western)

- HIST 0700 - WORLD HISTORY

Ancient History

- CLASS 0020 - ROMAN CIVILIZATION
- HIST 0400 - EAST ASIAN CIVILIZATION TO 1800
- HIST 1775 - ORIGINS OF CHRISTIANITY
- HIST 1781 - ROMAN HISTORY
- HIST 1783 - GREEK HISTORY

Geography

- AFRCNA 0385 - CARIBBEAN HISTORY
- HIST 0401 - MODERN EAST ASIAN CIVILIZATION
- HIST 0501 - MODERN LATIN AMERICA
- HIST 1164 - SMALL COUNTRIES AND THE EUROPEAN UNION

World Cultures

- ANTH 0780 - INTRODUCTION TO CULTURAL ANTHROPOLOGY
- HIST 1423 - MODERN CHINA
- HIST 1433 - MODERN JAPAN
- HIST 1796 - HISTORY OF AFRICA SINCE 1800

Area 2: Civics (3 credits)

Recommended courses.

- HIST 1641 - MODERN AMERICAN POLITICS
- PS 0200 - AMERICAN POLITICS
- PS 1231 - POLITICAL PARTIES AND ELECTIONS
- PS 1234 - ELECTORAL BEHAVIORS AND DEMOCRATIC PROCESS
- PS 1252 - STATE GOVERNMENT
- PS 1378 - BUILDING DEMOCRACY AROUND THE WORLD

Area 3: Economics (3 credits)

Recommended courses.

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- ECON 0800 - INTRODUCTION TO ECONOMICS

Area 4: Sociology and Social Foundations (3 credits)

Recommended courses.

- ADMPS 1001 - SOCIAL FOUNDATIONS OF EDUCATION
- SOC 0005 - SOCIETIES
- SOC 0010 - INTRODUCTION TO SOCIOLOGY
- SOC 1107 - CULTURAL SOCIOLOGY

Area 5: Foundations of Special Education (3 credits)

Required course.

- IL 1580 - FOUNDATIONS OF SPECIAL EDUC

Upper Level Electives (6 credits)

Recommended courses.

- GSWS 1180 - POLITICS OF GENDER AND FOOD
- LEGLST 1152 - LEGAL ISSUES IN PUBLIC SERVICE
- LEGLST 1210 - LAW AND POLITICS
- LEGLST 1320 - LAW AND ENVIRONMENT
- PS 1536 - HUMAN SECURITY
- PS 1542 - GLOBAL ENVIRONMENTAL POLITICS
- SOC 1119 - GLOBAL PERSPEVTIVES ON POPULAR CULTURE
- SOC 1445 - SOCIETY AND ENVIRONMENT
- SOC 1448 - WORKING WOMEN

Notes

- All courses selected for the social studies pre-education track must be approved by an academic advisor.
- At least half of these courses must be upper-division (1000-level) courses.
- Students are also encouraged to participate in an internship during their degree program and may fulfill some CGS general education and major requirements by completing a study abroad program.

Requirements are subject to change. Check with an academic advisor before registering.

An internship program is available through the College of General Studies. Please see your advisor for additional information.

General Education Requirements

To earn a Bachelor of Arts or a Bachelor of Science degree in the College of General Studies, you must satisfactorily complete a minimum of 120 credits (approximately 40 courses), at least 30 credits of which must be in upper-division (1000-level) courses (or 24 credits if pursuing the Natural Sciences major) . These 1000-level courses may come from any of the requirements for the degree listed below.

General Education Requirements (GERs) provide you with an opportunity to discover interests you never knew you had, all while earning credits toward graduation. And, no matter what your future holds, be it a career or grad school, GERs prepare you by emphasizing skills employers want (like critical thinking, problem solving, written and oral communication) and giving you the opportunity to become more aware of our increasingly diverse and interconnected world.

The College of General Studies provides a liberal arts and pre-professional education for undergraduate students that is grounded in scholarly excellence. Pitt offers you the knowledge, understanding, analytical tools, and communication skills you need to become perceptive, reflective, and intellectually self-conscious citizens within a diverse and rapidly changing world. GERs are at the core of our education.

Our **General Education Requirements changed for students entering as of Fall 2018 (2191) term**. See the CGS General Education Requirements for Fall 2018 and afterward here or visit the CGS General Education Requirements website.

Writing (9 credits)

Written communication is central to almost all disciplines and professions. Developing written proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment.

Introductory Composition Course (3 credits)

Students are required to take the college-level introductory composition course ENGCMP 0200 Seminar in Composition (SC). Students are exempted from this course if they earned a 660 on the SAT Evidence-Based Reading and Writing Section and a 5 on the Advanced Placement Exam. Given the importance of establishing a sound foundation for a student's writing, all students are required to pass SC with a grade of C- or better by the time they have completed 24 credits in enrollment. (Students who do not have a 560 on the SAT or a 24 or above on the ACT might also be required to take the skill-development course ENGCMP 0150 Workshop in Composition before enrolling in SC.)

Note for students transferring from the School of Engineering into CGS: successful completion of ENGR 0012 Intro to Engineering Computing may be used in place of ENGCMP 0200 Seminar in Composition.

Two Writing Intensive Courses (6 credits if not overlapped with other General Education requirements)

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20 - 24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion. All students must complete two courses that are designated as 'W-Courses', or one W-Course and a second English composition course. Students should satisfy one of these requirements by taking a W-Course in their major if it is available. **Students may not transfer credits in to satisfy this requirement. W-courses can be overlapped with other General Education courses, except for Professional Communication.**

Math/Algebra (3 credits)

Mastering college-level algebra is required for all students. These skills are foundational for student success in other general education courses.

Students are exempt from having to take Algebra with a 620 SAT Math or 27 ACT Math. Students who do not meet these criteria must earn a C- or higher in MATH 0020, MATH 0025, MATH 0031, CS 0004, or CS 0007. Given the importance of establishing a sound foundation in mathematics, all students are required to satisfy the Algebra requirement by the time they have completed 30 credits in enrollment.

Quantitative and Formal Reasoning (3 credits)

All students are required to take and pass with a grade of C- or better at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic.

A C- or better is needed in a course that satisfies this requirement. Students who qualify for placement in an upper-level course in mathematics on a proficiency placement test are exempt.

Diversity (3 credits)

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study, if available. Diversity courses may also be courses that fulfill other General Education Requirements. (3 credits if not overlapped with another General Education course)

Language/Communication (6-10 credits)

All students are required to take a sequence of two courses that provide them with advanced study of a second language other than English, or the ability to develop their skills in oral and professional communication. Students choose one of the following options below:

Option 1: A Sequence of Two Courses in a Second Language (6-10 credits)

Students complete with a grade of C- or better two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
2. Passing a special proficiency examination;
3. Transferring credits for two terms or more of approved university-level instruction in a second language with grades of C or better;
4. Having a native language other than English.

Option 2: A Sequence of Two Courses in Oral and Professional Communication (6 credits)

These classes advance the skills of the student to perform effectively in workplace environments or the public by communicating ideas and concepts and/or introduce students to theories that analyze and explain effective communication in these settings. Students must complete one of the following with a grade of C- or better: COMMRC 0520 or COMMRC 0500. Students select a second class from a list of approved courses.

Humanities and Arts, Social Sciences, and Natural Sciences (27 credits)

Each student is required to take nine courses in the humanities, social sciences, and natural sciences as distributed below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

One course in Literature (3 credits)

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

One course in the Arts (3 credits)

This course introduces students to modes of analysis appropriate to music, theater, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

One course in Creative Work (3 credits)

In this course, students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theater, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

One course in Philosophical Thinking or Ethics (3 credits)

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

One course in Social Sciences (3 credits)

A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

One course in Historical Analysis (3 credits)

In this course, students will develop skills and methods by which to understand significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.

Three courses in the Natural Sciences (9 credits)

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

Global Awareness and Cultural Understanding (9 credits)

Each student must complete three courses as distributed below:

One course in Global Issues (3 credits)

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law or the economy.

One course in a Specific Geographic Region (3 credits)

This course will be an in depth study and analysis of a particular region or locality outside the United States.

One course in Cross-Cultural Awareness (3 credits)

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping of General Education Courses

- Courses taken for general education requirements can also be applied to major requirements, when applicable.
- Diversity courses are allowed to overlap with other general education requirements.
- Writing ('W') courses are allowed to overlap with other general education requirements except for the Professional Communication requirement.
- Students may overlap the second course in their language sequence, taken at the college level, with the Geographic Region requirement, except for American Sign Language. This does not apply to students who satisfy the Language requirement through high school study, a proficiency examination, or native proficiency.

Specialized Study (the Major) (30-36 credits)

The baccalaureate degree, in addition to providing certain skills and broad exposure to the major bodies of knowledge, also allows the opportunity to specialize in a particular field, providing depth of experience essential for vocational competence or further graduate study. An outline of each major is available on the CGS Web site, www.cgs.pitt.edu.

Students admitted to CGS can choose from the following majors. Many majors offer a combination of face-to-face and online courses.

- Administration of justice
- Dental hygiene (for licensed dental hygienists)
- Health services (BA and BS)
- Humanities
- Legal studies
- Media and professional communications
- Natural sciences
- Public service
- Social sciences

Students who want a major in an arts and sciences field can begin in CGS and transfer to **the Dietrich School of Arts and Sciences** after completing 12 credits including the mathematics and seminar in composition requirements. Admission is determined **by the Dietrich School**.

Electives

Any credits not used specifically to satisfy the previous requirements are considered electives. Electives can be taken in a wide variety of subjects to complement, reinforce, or add further breadth to the chosen program of study or to help meet the requirements of a minor or certificate program.

Minor

Administration of Justice Minor

Current Pitt students interested in a CGS minor, rather than a major, in administration of justice should declare the minor by completing the CGS minor/certificate declaration form online. If you are a CGS student interested in adding this minor, please contact your CGS advisor.

Minor Requirements (15 credits)

Students must complete five courses (15 credits) with at least three courses from the University of Pittsburgh. A 2.0 average is required in the minor.

Required Courses

- ADMJ 0500 - INTRODUCTION TO ADMINISTRATION OF JUSTICE
- ADMJ 1400 - INTRODUCTION TO CRIMINAL LAW
- ADMJ Electives
  See Administration of Justice Major for current list of electives.

Legal Studies Minor

Current Pitt students interested in a CGS minor, rather than a major, in legal studies should declare the minor by completing the CGS minor/certificate declaration form online. If you are a CGS student interested in adding this minor, please contact your CGS advisor.

Minor requirements:

For the minor, students must complete five courses (15 credits) with at least three courses from the University of Pittsburgh. A 2.0 average is required in the minor.

Required Courses

- LEGLST 0080 - INTRODUCTION TO LEGAL STUDIES
  LEGLST Elective Courses

  See LEGLST major for a list of electives.

Public Service Minor

Current Pitt students interested in a CGS minor, rather than a major, in public service should declare the minor by completing the CGS minor/certificate declaration form online. If you are a CGS student interested in adding this minor, please contact your CGS advisor.

Minor Requirements

For the minor, students must complete five courses (15 credits) with at least three courses from the University of Pittsburgh. A 2.0 average is required in the minor.

Required courses:

- PUBSRV 0020 - INTRODUCTION TO PUBLIC SERVICE
- PUBSRV 0030 - PUBLIC POLICY PROCESS
- PUBSRV 0050 - ETHICS AND ACCOUNTABILITY
- PUBSRV - Electives
  See Public Service major for a list of electives.

Note:

Requirements are subject to change. Check with an academic advisor before registering.

Certificate

Accounting Certificate

Develop a practical and theoretical foundation in accounting while earning a certificate. Offered by the College of General Studies and the College of Business Administration, the 24-credit part-time evening program enables students to take the same subjects required for accounting majors in the Bachelor of Science in Business Administration program offered by the College of Business Administration.

Participants benefit from the academic instruction of the College of Business Administration and the nontraditional student services available through the College of General Studies. Credits earned may be counted toward certain state licensure requirements.

Who should participate:

Professionals who already have earned a bachelor's degree in any field and wish to develop careers in accounting or another business field in which substantial knowledge of accounting is an asset.

Upon completion of this certificate, participants will be able to:

- Apply substantial knowledge of accounting
- Enhance their careers in the business field
- Meet many of the requirements to sit for the certified public accountant (CPA) examination in Pennsylvania.

This certificate is applicable to fields such as public accounting, auditing, taxation, corporate accounting, governmental accounting, and other careers in business that require a substantial knowledge of financial and/or managerial accounting.

Admission requirements

A bachelor's degree and a 2.75 or higher cumulative grade point average are required for admission to the program. A certificate application must be completed online. For an application and additional information on admissions guidelines, see the CGS Admissions webpage. Credits earned at other accredited educational institutions will be evaluated for transfer. However, a minimum of 15 credits must be earned at the University of Pittsburgh. Students must earn a grade of C or better in all University accounting courses.

CPA preparation

Becoming a CPA in the state of Pennsylvania will require 150 credit hours of coursework, 36 credits of which must be in accounting, auditing, finance, tax, and business law. At that time, completing the certificate program will no longer be sufficient preparation to sit for the CPA exam. To learn about becoming a CPA in Pennsylvania, visit the Pennsylvania Institute of Certified Public Accountants Web site at www.picpa.org. You can also contact the Pennsylvania State Board of Accountancy for more information at 717-783-1404 or by E-mail at st-accountancy@pa.gov.

Obtaining the certificate

To receive the certificate, you must fill out an application with your academic advisor prior to completing your last term in the program. Check with your academic advisor for the application filing form and deadline, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Curriculum (24 credits)

Students must complete their required courses and a minimum of one elective course for a total of 24 credits. A grade of C or better is required for all courses in the program. Students must follow the approved prerequisites for each course. All courses are three credits, and all courses are offered in the evenings.

Required Courses

- CDACCT 6030 - FINANCIAL ACCOUNTING
- CDACCT 6040 - MANAGERIAL ACCOUNTING
- CDACCT 6204 - INTERMEDIATE FINANCIAL REPORTING 1
- CDACCT 6205 - INTERMEDIATE FINANCIAL REPORTING 2
- CDACCT 6236 - ACCOUNTING INFORMATION SYSTEMS
- CDACCT 6238 - AUDITING
- CDACCT 6242 - INDIVIDUAL TAX ACCOUNTING AND PLANNING

Electives

Take a minimum of one course.

- BUSENV 1760 - BUSINESS LAW
- CDACCT 6210 - FINANCIAL STATEMENT ANALYSIS
- CDACCT 6221 - STRATEGIC COST MANAGEMENT
- CDACCT 6216 - ADVANCED FINANCIAL ACCOUNTING

Additional Information

Requirements subject to change. Check with an academic advisor before registering.

Gainful Employment Information

Communication Certificate

The Certificate in Communication is a 24-credit program designed to train students to be more effective communicators. Courses, taught by faculty of the Department of Communication, include a range of specialized communication topics. Participants may elect to concentrate their studies in such areas as nonverbal, small group, interpersonal, organizational, or mass communication; persuasion in political settings; or the construction, analysis, and delivery of public speech.

Admission requirements:

Students must meet requirements for admission to the College of General Studies. A certificate application form must be completed and sybmitted online to the College of General Studies via https://www.cgs.pitt.edu/admission.

Who should participate:

- Business and professional people whose success may be enhanced by improved communication skills and further understanding of the communication process
- Those who wish to increase their personal knowledge of communication for use in their careers
- Citizens involved in community and public positions in which persuasive delivery and analysis are vital
- Persons seeking a better understanding of the impact of interpersonal, organizational, public, and mass communication in the contemporary world
- Students already enrolled in the College of General Studies or other University programs who want to concentrate on communications skills

Upon completion of this certificate, participants will be able to:

- Understand the makeup of a persusasive presentation
- Polish and refine their communication skills
- Apply concentrated knowledge of a specialized communication topics

This certificate is applicable to fields such as education, writing, broadcasting, public relations, sales, communication training, personnel, promotions, advertising, market research, lobbying, politics, communications, and related fields.

Curriculum (24 credits)

- The Communication certificate requires 24 credits, including nine (9) credits of core classes and 15 elective credits.
- Students must achieve a minimum grade of C (2.0) or better for all courses required for the program.
- Credits earned at other accredited educational institutions may be eligible for transfer. However, a minimum of nine (9) credits must be earned at the University of Pittsburgh.

Required Courses (9 credits)

Choose three of the following courses. All courses are 3 credits, unless otherwise noted.

- COMMRC 0500 - ARGUMENT
- COMMRC 0520 - PUBLIC SPEAKING
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- COMMRC 0540 - DISCUSSION
- COMMRC 0550 - SPEECH COMPOSITION

Electives (15 credits)

Choose five COMMRC courses. All courses are 3 credits, unless otherwise noted. Prerequisite courses are in parentheses; English Composition 0200 is required for all 1000-level courses. A sampling of courses that can be used to fulfill the certificate requirements include:

- COMMRC 0300 - COMMUNICATION PROCESS
- COMMRC 0310 - RHETORICAL PROCESS
- COMMRC 0320 - MASS COMMUNICATION PROCESS
- COMMRC 1101 - EVIDENCE
- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION (0300)
- COMMRC 1103 - RHETORIC AND CULTURE (0310 or 0320)
- COMMRC 1104 - POLITICAL COMMUNICATION (0310 or 0320)
- COMMRC 1105 - TELEVISION AND SOCIETY (0320)
- COMMRC 1106 - SMALL GROUP COMMUNICATION (0300)
- COMMRC 1109 - NONVERBAL COMMUNICATION (0300)
- COMMRC 1110 - THEORIES OF INTERPERSONAL COMMUNICATION (0300)
- COMMRC 1111 - THEORIES OF PERSUASION (0520 and 0310 or 0320)
- COMMRC 1112 - THEORIES OF RHETORIC (0310 or 0520)
- COMMRC 1114 - FREEDOM OF SPEECH AND PRESS (0310 or 0320)
- COMMRC 1117 - 21ST CENTURY PUBLIC ARGUMENT (0310 or 0320)
- COMMRC 1119 - PRESIDENTIAL RHETORIC 2 (0310 or 0320)
- COMMRC 1121 - HISTORY OF MASS MEDIA (0320)
- COMMRC 1122 - MEDIA CRITICISM (0320)
- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION
- COMMRC 1900 - COMMUNICATION INTERNSHIP or CGS 1900 - CHOOSING YOUR PATH: INTERNSHIP SEMINAR

Notes

Requirements subject to change. Check with an academic advisor before registering.

Community Health Assessment Certificate

Earning a certificate in community health assessment from the College of General Studies will provide a foundation in theory as well as an understanding of the diverse populations you may serve. This flexible program is perfect for social services or community health employees, nonprofit professionals interested in healthcare advocacy, and for those looking to advance into leadership positions.

Students who successfully complete this certificate may apply the credits to an undergraduate degree in the University of Pittsburgh College of General Studies (CGS), such as our bachelor of arts in health services.

Graduates of the program will be able to:

- communicate and interact effectively and professionally with people from diverse backgrounds;
- understand how social, cultural, legal, and environmental factors may impact the behaviors of both patients and health care workers and apply this knowledge to their careers;
- identify behaviors that tend to promote or compromise health;
- apply administrative and managerial skills to nonprofits and community health organizations; and

- identify, recognize, gather, and analyze data that are pertinent to the health services field.

Admission requirements

Students must meet requirements for admission to the College of General Studies. A certificate application form must be completed and returned to the CGS.

Obtaining the certificate

To receive the certificate, you must fill out an application with your academic advisor prior to completing your last term in the program. Check with an academic advisor for the application form and filing deadline, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Program Requirements

- The community health assessment certificate requires 18 credits.
- Students must achieve a minimum grade of C (2.0) or better for all courses required for the program.
- Credits earned at other accredited educational institutions may be eligible for transfer. However, a minimum of nine (9) credits must be earned at the University of Pittsburgh.

Curriculum (18 credits)

Required courses

- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION Health Communication
- HRS 1017 - INTRODUCTION TO EPIDEMIOLOGY
- NUR 1765 - RISK FACTORS AND HEALTH
- NUR 1829 - CONTEM ISSUES CROSS CULTL HEALTH
- PUBSRV 1305 - HEALTH, LAW AND ETHICS
  Choose one of the following:
- SOC 0477 - MEDICAL SOCIOLOGY
- PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT

Corporate/Community Relations Certificate

The Certificate in Corporate and Community Relations is an interdisciplinary course of study that helps students to develop the skills they need to effectively communicate a business or organization's mission and achievements to the outside community. It also teaches them how to effectively communicate organizational news and policies internally to fellow employees. Students learn to develop messages and communications strategies that engage the community and promote an organization's image in a positive way.

The certificate is available as a stand-alone option or can be pursued as part of a degree.

Who should enroll:

- Individuals charged with communicating company and organizational news, policies, benefits, and messages to fellow employees
- Individuals charged with communicating and disseminating company and organizational news to an external audience, thereby improving public perception of the organization
- Individuals interested in advancing the causes of community, civic, or volunteer organizations
- Recent graduates or current students who wish to pursue a career incorporate or community communications

Upon completion of this program, students will be able to:

- apply a theoretical understanding of mass media process, history, and ethics to communications-related careers in broadcasting, journalism, legal professions, government, nonprofits, and other fields;
- identify and analyze audience traits, perspectives, and motivators and develop messages appropriate to each audience;

- manage and navigate professional relationships with a wide rangeof constituents;
- develop and write clear messages that support specific organizational goals and enhance the image of a professional organization in the public's mind; and
- create professional and effective communication strategies as well as persuasive written materials, customized to the needs of a specific profession, such as business proposals, speeches, marketing plans, and news stories.

This certificate is applicable to such fields as corporate communications, nonprofit management, advocacy, public relations, broadcasting, sales, communication training, promotions, advertising, lobbying and politics, human resources and relations, and training and development.

Admission requirements

Students must meet requirements for admission to the College of General Studies. A certificate application must be completed and returned to the College of General Studies. To avoid a late fee, you should complete this process when registering for courses.

Obtaining the certificate

To receive the certificate, you must fill out an application with your academic advisor prior to completing your last term in the program. Check with your academic advisor for the application filing form and deadline, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Curriculum (18 credits)

- The Corporate and Community Relations certificate requires 18 credits, including six (6) credits of core classes, six (6) elective credits, and six (6) specialization credits.
- Students must achieve a minimum grade of C (2.0) or better for all courses required for the program.
- Credits earned at other accredited educational institutions may be eligible for transfer. However, a minimum of nine (9) credits must be earned at the University of Pittsburgh.

Required Courses (6 credits)

- COMMRC 0320 - MASS COMMUNICATION PROCESS
- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION

Electives (6 credits)

Choose two courses from the following:

- BUSERV 1940 - MARKETING FUNDAMENTALS
- COMMRC 1111 - THEORIES OF PERSUASION
- COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION
- PUBSRV 1455 - LAW, ETHICS AND PUBLIC POLICY IN THE MASS MEDIA

Note

CBA students: BUSERV 1940 Marketing Fundamentals may be substituted with BUSMKT 1040 Intro to Marketing.

Specializations (6 credits)

- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION
- COMMRC 1125 - MEDIA THEORY
- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION : Health Communication
- COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION : Communication and New Media Technologies
- ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS
- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0515 - PERSAUSIVE WRITING IN ADVERTISING
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN

- ENGCMP 0550 - TOPICS IN PUBLIC/PROFESSIONAL WRITING
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 0641 - WRITING FOR CHANGE
- ENGCMP 1103 - PUBLIC RELATIONS WRITING
- ENGCMP 1104 - CORPORATE STORYTELLING
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1120 - HISTORY AND ETHICS OF ADVERTISING AND PUBLIC RELATIONS
- ENGCMP 1270 - PROJECTS IN BLACK RHETORIC
- ENGCMP 1400 - GRANT WRITING
- ENGCMP 1401 - WRITING FOR FUNDRAISING AND DEVELOPMENT
- ENGCMP 1420 - WRITING PROPOSALS FOR BUSINESS
- ENGWRT 0710 - INTRO TO AUDIO STORYTELLING
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA
- PSY 1635 - ORGANIZATIONAL PSYCHOLOGY
- PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT
- PUBSRV 1310 - DIVERSITY ISSUES IN PUBLIC SERVICE
- SOC 0490 - MASS MEDIA

Digital Media Certificate

Businesses and media organizations today must create, produce, and manage content for multiple platforms, from print and broadcast to online. Whether you're an emerging media professional or work in the marketing or communications department of a business or nonprofit organization, you can benefit from training in digital media.

The 18 credit intedisciplinary Digital Media certificate program offered by CGS introduces you to the power of multimedia content-written, audio, and visual-and how it can be used to communicate with and persuade audiences. You'll choose from a variety of courses in communications, arts, English, film studies, psychology, and political science.

This certificate can be completed as a stand-alone program or in conjunction with another degree at the University of Pittsburgh.

Who should participate:

- Professionals operating in multimedia environments
- Individuals responsible for e-commerce efforts
- People interested in producing content for online publications and sites, films, documentaries, etc.
- Entrepreneurs
- Educators

Upon completion of this certificate, participants will be able to:

- Understand how concepts, design, and technology work together to communicate with mass audiences
- Design, create, and manipulate digital communication vehicles
- Understand the importance of visual and textual communication in maintaining organizational success
- Produce engaging interactive programs, such as for training or sales purposes

This certificate is applicable to such fields as interactive online training; electronic catalogs; DVDs for sales, marketing, or training purposes; multimedia businesses; and general e-commerce.

Admission Requirements

Students must meet College of General Studies certificate application requirements and complete an application form online. To avoid a late fee, you should complete the application process when registering for courses and prior to completing your last term in the program. For more information, visit http://www.cgs.pitt.edu/admissions or see a CGS advisor.

Curriculum (18 credits)

- The digital media certificate requires 18 credits, including nine (9) credits of core classes and nine (9) elective credits.
- Students must achieve a minimum grade of C (2.0) or better for all courses required for the program.
- Credits earned at other accredited educational institutions may be eligible for transfer. However, a minimum of nince (9) credits must be earned at the University of Pittsburgh.

Required Courses (9 credits)

- COMMRC 0320 - MASS COMMUNICATION PROCESS
- COMMRC 1122 - MEDIA CRITICISM
- ENGFLM 0355 - VISUAL LITERACY or ENGFLM 0401 - INTRODUCTION TO VISUAL CULTURE

Electives (9 credits)

Choose three of the courses listed below.

- COMMRC 1105 - TELEVISION AND SOCIETY
- COMMRC 1125 - MEDIA THEORY
- COMMRC 1126 - MEDIA AND CONSUMER CULTURE
- CS 0134 - WEB SITE DESIGN AND DEVELOPMENT
- ENGCMP 0425 - DIGITAL HUMANITY cross-listed with HAA 0425
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION
- ENGCMP 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN
- ENGFLM 0400 - INTRODUCTION TO FILM
- ENGFLM 1390 - CONTEMPORARY FILM
- ENGFLM 1485 - FILM AND POLITICS
- ENGFLM 1683 - DOCUMENTARY FILM
- ENGFLM 1695 - HORROR FILM
- ENGLIT 0354 - WORDS AND IMAGES
- ENGLIT 0550 - INTRODUCTION TO POPULAR CULTURE
- ENGWRT 0650 - READINGS IN JOURNALISM
- ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE
- FILMST 0001 - FILMMAKING 1: FUNDAMENTALS
- FILMST 0120 - PHOTOGRAPHY 1
- FILMST 0121 - ANIMATION 1
- FILMST 0250 - BUSINESS OF PHOTOGRAPHY AND MULTIMEDIA
- FILMST 0400 - POST-PRODUCTION
- FILMST 0430 - AUDIO PRODUCTION
- FILMST 0601 - FILMMAKING 2: SIGHT AND SOUND
- FILMST 0610 - DIGITAL EFFECTS 1
- FILMST 1001 - BROADCASTING
- FILMST 1132 - ELEMENTS OF SCREENWRITING
- FILMST 1600 - FILMMAKING 3: STORY TO SCREEN
- HAA 0090 - INTRODUCTION TO CONTEMPORARY ART
- HAA 0470 - PHOTOGRAPHY AND ART
- PS 1836 - POLITICS THROUGH FILM
- PSY 1080 - PSYCHOLOGY AND THE MEDIA
- SA 0110 - VISUAL THINKING
- SA 0130 - DRAWING STUDIO 1
- SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1
- SA 1270 - DIGITAL STUDIO: IMAGING
- SOC 0490 - MASS MEDIA

Notes

Requirements subject to change. Check with an academic advisor before registering.

Gender, Sexuality, and Women Studies Certificate

The undergraduate Certificate in Gender, Sexuality, and Women's Studies is an interdisciplinary academic program providing students with the opportunity to broaden their understanding of the changing role that gender plays, both in the United States and around the world. The GSWS Certificate is housed in the College of General Studies and offered in partnership with the Gender, Sexuality, and Women's Studies program. Participants benefit from the academic instruction of GSWS faculty and the nontraditional student services available through the College of General Studies.

Students who want to explore the intersection of gender with race, class, ethnicity, ability, and sexual orientation will find courses of interest, as will students who want to know more about the role of women in history, literature and the arts, media, and science. Students who are planning careers in medicine, the creative arts, social work, education, counseling, law, therapy, and business often find that a background in women's studies enhances their professional activities.

The certificate is available as a stand-alone option or can be pursued as part of a degree.

Admission Requirements

Students must meet College of General Studies certificate application requirements and complete an application form online. For more information, visit http://www.cgs.pitt.edu/admissions.

Certificate Requirements (18 credits)

The Certificate in Gender, Sexuality, and Women's Studies is an 18-credit certificate:

- Transfer courses will be accepted on a case-by-case basis up to a maximum of two courses.
- A cumulative grade point average of 2.0 or higher is required in courses being applied to the certificate.
- A minimum of 12 credits must be earned at the University of Pittsburgh.
- The GSWS Certificate may not be pursued concurrently with the B.A. in Gender, Sexuality, and Women's Studies or with the GSWS minor.
- All certificate students are expected to meet at least once per year with the GSWS advisor to update their files and discuss what courses are needed to fulfill certificate requirements.

Core Courses (6 credits)

A minimum of two courses (six credits) are required (preferably to be completed early in the student's academic program).

- GSWS 0100 - INTRODUCTION TO GENDER, SEXUALITY, AND WOMEN'S STUDIES
- GSWS 0150 - GENDER IN THE PROFESSIONS (available as of Spring 2021) or
- GSWS 0500 - INTRODUCTION TO FEMINIST THEORY *or*
- GSWS 0550 - SEX AND SEXUALITIES
  Students are advised to take all four core courses to cover the key areas represented by the program (in which case two of these courses will count towards the program electives).

Electives (9 credits)

Three elective courses must be taken from at least two different academic departments (GSWS can count as one of these 2 departments). Courses must be approved for GSWS credit (consult Pitt's Course Catalog for current listings). Some approved courses are:

- ADMJ 1242 - GENDER, RACE, CLASS, AND CRIME
- AFRCNA 0454 - MAN/WOMAN LITERATURE
- ANTH 0768 - HUMAN SEXUALITY IN CROSS CULTURE
- ENGCMP 0203 - SEMINAR IN COMPOSITION: GENDER STUDIES
- ENGLIT 0610 - WOMEN AND LITERATURE

- ENGLIT 0630 - SEXUALITY AND REPRESENTATION
- FR 0012 - FRENCH KISS: LOVE, SEX, FRANCE
- GSWS 0200 - SEX, RACE, AND POPULAR CULTURE
- GSWS 0600 - GLOBAL LGBTQ LITERATURE
- LEGLST 1315 - SEX, LAW AND MARRIAGE
- PSY 0184 - PSYCHOLOGY OF GENDER
- SOC 0446 - SOCIOLOGY OF GENDER
- SOC 1448 - WORKING WOMEN
- Either GSWS 1900 - INTERNSHIP or GSWS 1901 - INDEPENDENT STUDY may be used to meet an elective requirement, but in this case, the two other courses must each be in different departments. Consult with the GSWS advisor. Special permission from the GSWS advisor required.

Interdisciplinary Course (3 credits)

Choose one upper-level advanced GSWS course (three credits); GSWS 0100 and GSWS 0500 (or GSWS 0550) are prerequisites for some of these courses. Below is a sample list of approved courses:

- GSWS 1140 - SPECIAL TOPICS
- GSWS 1150 - TRANSNATIONAL FEMINISMS
- GSWS 1170 - QUEER THEORY
- GSWS 1180 - POLITICS OF GENDER AND FOOD
- GSWS 1190 - MASCULINITIES
- GSWS 1300 - WANDERLUST: SEX & GENDER IN GLOBAL TOURISM
- GSWS 1450 - GENDER AND SUSTAINABILITY

Notes

Requirements subject to change. Check with an academic advisor before registering.

Information System Design Certificate

This innovative 18-credit program responds to the increasing industry demand for information system professionals. Offered in partnership with the School of Computing and Information (SCI), this multifaceted undergraduate certificate can be completed as a stand-alone continuing education program or serve as preparation for a bachelor's, master's, or doctoral degree.

Who should participate:

- Professionals in another field who wish to enter the information management field
- Individuals working in the technology field who want or need more formal training to progress in their careers
- People wanting to prepare for a master's degree in information sciences

Upon completion of this certificate, participants will be able to:

- Use scientific programming language to introduce information structures such as linked lists, stacks, and queues
- Develop program modules using a current programming language
- Utilize the theories of data structures and programming language design

These competencies may be applied to positions such as system designer, database developer, database manager, interactive system designer, expert system designer, information retrieval specialist, network designer, database marketer, or administrator who advises and implements technology purchases and upgrades.

This certificate is applicable to fields such as banking, healthcare, library science, judicial systems, communication, education, agriculture, private industry, and government.

Admission requirements

Students must meet requirements for admission to the College of General Studies. For admissions guidelines and an application, see www.cgs.pitt.edu. A certificate application form must be completed and returned to the College of General Studies.

Program Prerequisites

Before applying to this program, students should have completed 1) a college algebra class, and 2) an introductory informations systems course or a programming course, earning a C or better in both.

- Recommended programming courses: INFSCI 0010 INTRODUCTION TO INFORMATION, SYSTEMS AND SOCIETY, CS 0007 INTRODUCTION TO COMPUTER PROGRAMMING, CS 0008 INTRODUCTION TO COMPUTER PROGRAMMING WITH PYTHON , or CS 0004 INTRODUCTION TO COMPUTER PROGRAMMING-BASIC .

Obtaining the certificate

To receive the certificate, you must fill out an application with your advisor prior to completing your last term in the program. Check with your advisor for the application filing form and deadline, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Curriculum (18 credits)

Students must complete a total of 18 credits as follows. All courses must be completed with a C or better grade.

- INFSCI 0017 - FUNDAMENTALS OF OBJECT-ORIENTED PROGRAMMING Computer Science students may use CS 0401 in lieu of INFSCI 0017 (effective Fall 2020: CMPINF 0401 INTERMEDIATE PROGRAMMING)
- INFSCI 1022 - DATABASE MANAGEMENT SYSTEMS (effective Fall 2020: INFSCI 1500 DATABASE MANAGEMENT CONCEPTS AND APPLICATIONS)
- INFSCI 1024 - ANALYSIS OF INFORMATION SYSTEMS (effective Fall 2020: INFSCI 1400 ANALYSIS OF INFORMATION SYSTEMS)
- INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN (effective Fall 2020: INFSCI 0410 HUMAN-CENTERED SYSTEMS)
- INFSCI 1070 - INTRODUCTION TO TELECOMMUNICATIONS AND NETWORKS (effective Fall 2020: INFSCI 0610 NETWORKS AND INFORMATION)
  Choose one elective from the following:
- INFSCI 1014 - GRAPHICS
- INFSCI 1025 - DESIGN OF INFORMATION SYSTEMS
- INFSCI 1027 - IT PROJECT MANAGEMENT (effective Fall 2020: INFSCI 1460 IT PROJECT MANAGEMENT)
- INFSCI 1031 - GOING DIGITAL: TRANSFORMATIONAL CHANGE
- INFSCI 1052 - USER CENTERED DESIGN (effective Fall 2020: INFSCI 1420 USER-CENTERED DESIGN)
- INFSCI 1059 - WEB PROGRAMMING
- INFSCI 1068 - GEOSPATIAL INFORMATION SYSTEMS (GIS) (effective Fall 2020: INFSCI 1550 SPATIAL INFORMATION)
- INFSCI 1074 - COMPUTER SECURITY (effective Fall 2020: INFSCI 1620 ADVANCED SECURITY AND PRIVACY)
- INFSCI 1075 - NETWORK SECURITY (effective Fall 2020: INFSCI 1600 SECURITY AND PRIVACY)

Notes

Requirements subject to change. Check with an academic advisor before registering.

Leadership Certificate

The Certificate in Leadership provides a structured framework of courses and experiences for acquiring the basic practical and analytical skills required of successful public and private sector leaders. Offered by the University of Pittsburgh College of General Studies, this program uses the skills and knowledge of students to help advance their careers further, and take their organizations to the next level.

This 18-credit program is designed for students looking to become a more attractive candidate for a managerial or leadership position in their chosen field, or for those students looking to enter into the business, nonprofit, government, or corporate world.

Who should participate:

The Certificate in Leadership is open to any University of Pittsburgh degree-seeking student, regardless of current school or college, who anticipates moving into a leadership role in business, nonprofit, or other organization.

Upon completion of this certificate, participants will be able to:

- Demonstrate knowledge of leadership theories and models, such as situational, participative, transformational, and servant leadership
- Identify and evaluate the effectiveness of different communicative styles, and communicate clearly and effectively themselves
- Analyze an organization in its cultural, social, historical, developmental, geographic, and/or competitive aspects, and decide which type of leadership style would be most effectivein that situation
- Determine one's fit to the leadership-related challenges of an organization and what one would need to be more effective as a leader in that situation.

Admission requirements

Students wishing to pursue the Certificate in Leadership must be in good academic standing and must submit a certificate application form to the College of General Studies. The form is available through the college's admissions website.

Obtaining the certificate

To receive the certificate, you must fill out an application with your academic advisor prior to completing your last term in the program. Check with your academic advisor for the application filing form and deadline, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Pre-Requisite Requirements

Because strong communication skills are essential, prior to enrolling in LDRSHP 1200 students must have completed at least one class each in oral and written communication with a C or better.

Recommended Pre-Requisite Courses

- COMMRC 0520 - PUBLIC SPEAKING
  BUSORG 1101 and COMMRC 0500 can be subsituted for COMMRC 0520
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
  ENGCMP 0420, ENGCMP 0440, and ENGCMP 0450 or ENGWRT 0550 and ENGWRT 0610 can be substituted for ENGCMP 0400.

Co-Curricular Requirement: Emerging Leaders Program

All students must complete the Emerging Leaders Program, a 20 hour non-credit program run by the Cross Culture and Leadership Development Office within the Office of Student Affairs. For more information on the program, please visit www.studentaffairs.pitt.edu/ccldel.

Curriculum (18 credits)

Students must complete their required and elective courses for a total of 18 credits. A grade of C or better is required for all courses in the program. Students also must complete the Emerging Leaders Program. All courses are 3 credits, unless otherwise noted.

Required Courses (6 credits)

Students must complete LDRSHP 1100, the Emerging Leaders Program, and the program pre-requisite requirements listed above prior to registering for LDRSHP 1200.

- LDRSHP 1100 - THEORIES OF LEADERSHIP
- LDRSHP 1200 - LEADERSHIP SEMINAR

Electives (12 credits)

Students must complete at least one course from each of the three designated areas below, and complete 12 credits in all. At least half of the courses must be at the 1000-level.

Area One: Leadership and Ethics

- COMMRC 1161 - COMMUNICATION ETHICS
- PHIL 0300 - INTRODUCTION TO ETHICS
- PHIL 0350 - PHILOSOPHY AND PUBLIC ISSUES
- PHIL 1300 - ETHICAL THEORY
- PHIL 1380 - BUSINESS ETHICS
- PUBSRV 0050 - ETHICS AND ACCOUNTABILITY
- PUBSRV 1305 - HEALTH, LAW AND ETHICS
- PUBSRV 1340 - STRATEGIC PLANNING PUBLIC SECTOR
  These may be used as leadership electives for qualified students.
- AFROTC 1014 - LEADING AND COMMUNICATIONS 2
- MILS 0021 - LEADERSHIP & DECISION MAKING
- PS 1910 - INSTITUTE OF POLITICS INTERNSHIP/SEMINAR (cross-listed with PUBSRV 1910)

Note

- Nursing students mays use NUR 1085 Ethics in Nursing and Health Care (3cr) toward AREA 1: Leadership and Ethics electives.
- SHRS students may use REHSCI Rehabilitation Ethics (2cr.) toward AREA 1: Leadership and Ethics electives.

Area Two: Interpersonal Relations

- AFRCNA 1535 - DIMENSIONS OF RACISM
- ANTH 1760 - ANTHROPOLOGY OF LAW
- COMMRC 0300 - COMMUNICATION PROCESS
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION
- COMMRC 1106 - SMALL GROUP COMMUNICATION
- COMMRC 1109 - NONVERBAL COMMUNICATION
- COMMRC 1111 - THEORIES OF PERSUASION
- ECON 0200 - GAME THEORY PRINCIPLES
- ENGCMP 1100 - LANGUAGE OF BUSINESS AND INDUSTRY
- ENGCMP 1103 - PUBLIC RELATIONS WRITING
- ENGCMP 1400 - GRANT WRITING
- PSY 0010 - INTRODUCTION TO PSYCHOLOGY
- PSY 0105 - INTRODUCTION TO SOCIAL PSYCHOLOGY
- PSY 0405 - LEARNING AND MOTIVATION
- PSY 1135 - SOCIAL PERCEPTION AND COGNITION
- PSY 1635 - ORGANIZATIONAL PSYCHOLOGY
- SOC 0431 - BUREAUCRACIES

Area Three: Situational Analysis

- ANTH 0701 - CULTURAL ANTHROPOLOGY: OVERVIEW
- ANTH 0780 - INTRODUCTION TO CULTURAL ANTHROPOLOGY
- ANTH 1737 - SPECIAL TOPICS IN CULTURAL ANTHROPOLOGY Semiotic Anthropology
- ANTH 1738 - GENDER PERSPECTIVES IN ANTHROPOLOGY
- ANTH 1755 - URBAN ANTHROPOLOGY
- ECON 0150 - ECONOMIC DATA ANALYSIS
- ECON 0800 - INTRODUCTION TO ECONOMICS Students with a grade of C or better in ECON 0100 and ECON 0110 can substitite for ECON 0800. Use one for the requirement.
- HIST 0050 - SOCIAL CHANGE (cross-listed with SOC 0351)
- LING 1235 - LANGUAGE, GENDER AND SEXUALITY (cross-listed with GSWS 1235)

- PS 1241 - PUBLIC ADMINISTRATION AND POLITICAL SYSTEM
- SOC 0010 - INTRODUCTION TO SOCIOLOGY
- SOC 0150 - SOCIAL THEORY
- SOC 0432 - WEALTH AND POWER
- SOC 0444 - URBAN SOCIOLOGY
- SOC 1448 - WORKING WOMEN
- URBNST 1614 - URBAN SUSTAINABILITY

Note

Students may not use more than one of each of the courses in these groups: 1) ANTH 0701 and 0780; 2) ANTH 1755, SOC 0444 and URBNST 1614.

Note

Requirements subject to change. Check with an academic advisor before registering.

Managing Health Services Programs and Projects Certificate

Improve your administrative and business skills and earn a Certificate in Managing Health Services Programs and Projects. This 18-credit, interdisciplinary program emphasizes grant and research project management, and is designed to educate health service workers in the areas of sociology, communications, public administration, and management.

The program is applicable to positions such as health project manager, health administration director, health program director, and medical office manager. Students who successfully complete this certificate may apply the credits earned to an undergraduate degree at the University of Pittsburgh College of General Studies (CGS).

Upon completion of this certificate, students will be able to:

- manage health services research projects, grants, contracts, and finances;
- demonstrate the skills necessary to assume an administrative or managerial role in a health care organization;
- apply organizational theory and concepts to health care facilities; and
- analyze how physical, social, and cultural factors may help or hinder communication about health care needs.

Who should enroll:

- Health care workers who have been charged with, or would like to take on, management of grants and research projects
- Public and community health workers who seek an understanding of how physical, social, and cultural factors may help or hinder communication about health care needs
- Health care employees looking to take on leadership roles in the workplace

Admission requirements

Students must meet the requirements for admission to the College of General Studies. A certificate application must be completed and returned to the College of General Studies.

Obtaining the certificate

To receive the certificate, you must fill out an application with your advisor prior to completing your last term in the program. Check with your advisor for the application form and filing deadline, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Program Requirements

- The Managing Health Services Programs and Projects certificate requires 18 credits, including five (5) required courses and at least one (1) elective.
- Credits earned at other accredited educational institutions may be eligible for transfer. However, a minimum of 9 credits must be earned at the University of Pittsburgh.
- Students must achieve a minimum grade of C (2.0) or better for all courses required for the certificate.

Required Courses (15 credits)

- BUSERV 1915 - INTRODUCTION TO MANAGEMENT
- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION : Health
- HRS 1017 - INTRODUCTION TO EPIDEMIOLOGY
- NUR 1829 - CONTEM ISSUES CROSS CULTL HEALTH
- PUBSRV 0040 - PUBLIC SERVICE TECHNOLOGIES

Electives (3 credits)

Take a minimum of one course.

- HRS 1009 - ORGANIZATIONAL THEORY & BEHAVIOR or BUSORG 1020 - ORGANIZATIONAL BEHAVIOR or COMMRC 1102 - ORGANIZATIONAL COMMUNICATION
- ENGCMP 1400 - GRANT WRITING
- PUBSRV 1110 - FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR
- PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS

National Preparedness and Homeland Security Certificate

The Certificate in National Preparedness and Homeland Security (NPHS) is designed to teach current and future emergency professionals to analyze information and make decisions in dynamic and complex crisis environments using new and powerful analytic tools. Through experience-based learning activities, certificate students will develop the skills they need to thrive in homeland security and emergency preparedness careers.

This unique 18-credit certificate incorporates hands-on learning methods. The program features dynamic modeling tools developed at the University of Pittsburgh to plan for and respond to disasters; exercises and simulations that follow protocols established by the U.S. Department of Homeland Security; and tools that use virtual reality, visualization, and Geographic Information Systems (GIS) software to integrate information for crisis decision making.

Who should participate:

- Employees of local, state, and federal entities engaged in emergency preparedness, homeland security, and related fields
- Business people who are charged with risk management and are interested in applying industry tested analytics to developing emergency management and continuity of operations (COOP) plans
- Professionals in organizations with first-responders and first receivers, and those looking to step into such leadership positions
- Veterans interested in building on their expertise in decision-making and crisis leadership
- Career changers and current degree seekers looking to enter a growing and important field that uses a data-driven approach to preparedness activities involving both planning and implementation.

Upon completion of this certificate, participants will be able to:

- Develop and implement organizational risk profiles, COOP plans, business recovery plans, and other risk management activities
- Use knowledge of federal, state, and local agency responsibilities to effectively plan and execute emergency response plans
- Apply incident command protocols and consensus building approaches
- Communicate effectively in a crisis, orally and in writing, and transfer information effectively to obtain positive outcomes
- Plan prevention and preparedness operations and measures that help communities handle efforts related to damage limitation, emergency response, and recovery

Admission requirements

Applicants must have completed at least 60 credits with a grade point average of 2.0. If you are not currently enrolled at the University of Pittsburgh, you must submit official transcripts from all prior institutions with the application. Students must meet requirements for admission to a certificate program in the College of General Studies. For admission guidelines and an application, go to https://www.cgs.pitt.edu/admission.

Curriculum (18 credits)

The certificate is composed of twelve credits of required core courses, and six credits of elective courses. Core courses cover foundational content and procedures central to national preparedness and emergency response, in addition to analytical tools and approaches. They include a capstone experience in which students will plan, role-play, and report on a complete disaster scenario involving critical infrastructure sectors such as energy, government, transportation, health, and telecommunications. Elective courses allow students to gain further knowledge or experience relevant to their current or intended career paths in such fields as health, information security, and business continuity. All courses are 3 credits, unless otherwise noted.

- No course with a grade below C will be accepted for certificate credit
- To earn the certificate, students must maintain at least a 2.0 grade point average
- All four required core courses must be completed at the University of Pittsburgh to earn the certificate
- A maximum of six credits may be accepted from other institutions for elective courses
- Students should consult with their advisor and/or core course faculty early in their program to identify elective courses appropriate for their career and/or academc interests

Required Courses (12 credits)

Students must have successfully completed at least one other core course prior to registering for the capstone course. The capstone course may be taken concurrently with another core course.

- NPHS 1510 - FEDERAL AND INTERNATIONAL FRAMEWORK FOR EMERGENCY PREPAREDNESS
- NPHS 1520 - STATE AND LOCAL FRAMEWORK FOR EMERGENCY PREPAREDNESS
- NPHS 1530 - ANALYSIS, INTELLIGENCE AND DECISION TOOLS FOR EMERGENCY PREPAREDNESS
- NPHS 1540 - CAPSTONE COURSE IN EMERGENCY PREPAREDNESS

Electives (6 credits)

The following list shows a sample of courses already approved as electives:

- ADMJ 1234 - INTRODUCTION TO CYBERCRIME
- ADMJ 1238 - CYBER SECURITY, LAW, AND MONEY LAUNDERING
- ADMJ 1245 - TERRORISM
- ADMJ 1425 - PRINCIPLES OF HOMELAND SECURITY (cross-listed with PUBSRV 1425 - PRINCIPLES OF HOMELAND SECURITY)
- CS 1655 - SECURE DATA MANAGEMENT AND WEB APPLICATIONS
- CS 1675 - INTRODUCTION TO MACHINE LEARNING
- CS 1699 - SPECIAL TOPICS IN COMPUTER SCIENCE Privacy in Electronic Society
- ECON 0150 - ECONOMIC DATA ANALYSIS
- GEOL 0820 - NATURAL DISASTERS
- INFSCI 1068 - GEOSPATIAL INFORMATION SYSTEMS (GIS) (effective Fall 2020: INFSCI 1550 SPATIAL INFORMATION) or IE 1015 - GEOGRAPHIC INFORMATION SYSTEMS
- INFSCI 1070 - INTRODUCTION TO TELECOMMUNICATIONS AND NETWORKS (effective Fall 2020: INFSCI 0610 NETWORKS AND INFORMATION)
- INFSCI 1074 - COMPUTER SECURITY (effective Fall 2020: INFSCI 1620 INFSCI 1620 - ADVANCED SECURITY AND PRIVACY)
- NPHS 1900 - INTERNSHIP
- NPHS 1901 - INDEPENDENT STUDY
- NUR 1061 - INDEPENDENT STUDY
- PS 1503 - INTERNATIONAL ORGANIZATION
- PS 1509 - CONFLICT AND WAR THEORY
- PS 1583 - TOPCS IN INTERNATIONAL RELATIONS European and Global Security
- PUBSRV 1320 - GEOGRAPHIC INFORMATION SYSTEMS IN THE PUBLIC SERVICE

Notes

Students must meet all relevant course prerequisites. NPHS Internship and NPHS Independent Study courses may be repeated for credit with permission.

Note: With the approval of the NPHS advisor, students enrolled in the SHRS Emergency Medicine (EM) program may apply up to six (6) credits of EM courses toward the NPHS certificate electives.

Requirements subject to change. Check with an academic advisor before registering.

Center for National Preparedness

The Center for National Preparedness (www.cnp.pitt.edu) is an interdisciplinary collaboration of experts and departments at the University of Pittsburgh. It provides research, education, and service aimed at advancing the science, policy and implementation of effective federal, state, and local preparedness efforts across the public and private sectors. The Center possesses expertise in business continuity, information technology, engineering, medical research, national security policy, and public health.

Nonprofit Management Certificate

Nonprofit agencies of all kinds are being established to fulfill needs in our communities, while existing community benefit organizations are expanding to meet increasing demand for services. This growth means new opportunities in the rewarding nonprofit sector.

The right education is critical to demonstrating your qualifications to prospective employers. A Certificate in Nonprofit Management, alone or coupled with an appropriate bachelor's or advanced degree, will aid in your quest for employment by or promotion within a nonprofit organization.

Students who successfully complete this certificate may apply the credits to an undergraduate degree in public service at the University of Pittsburgh College of General Studies.

Who should enroll:

- Professionals with public relations experience
- Professionals with an interest in fundraising
- Professionals with a background in program development
- Professionals with knowledge of marketing and advertising
- Recent graduates or current students who wish to pursue a career in the nonprofit field
- Undergraduate degree-seeking students who wish to have an intermediate credential
- Technology workers
- Public service majors
- Entrepreneurs who wish to start a nonprofit

Upon completion of this certificate, participants will be able to:

- organize, manage, or supervise a nonprofit organization;
- hire and train an efficient staff;
- understand the structural and financial issues unique to nonprofits;
- effectively raise revenue through fundraising; and
- write grant proposals.

This certificate is applicable to positions such as grant writers, fundraisers, development officers, accountants, information technology workers, and office managers.

Admission requirements

Students must meet requirements for admission to the College of General Studies. A certificate application must be completed. To avoid a late fee, you should complete this process when registering for courses.

Curriculum (18 credits)

- PUBSRV 0020 - INTRODUCTION TO PUBLIC SERVICE
- PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT
- PUBSRV 1210 - FINANCIAL MANAGEMENT OF NON-PROFIT ORGANIZATIONS
- PUBSRV 1220 - HUMAN RESOURCE MANAGEMENT OF NON-PROFIT ORGANIZATIONS
- PUBSRV 1900 - INTERNSHIP SEMINAR

Notes

Notes:

- Credits earned at other accredited educational institutions may be eligible for transfer. However, a minimum of nine credits must be earned at the University of Pittsburgh.
- Although courses for the certificate can be taken in any order, we strongly recommend that students consider completing PUBSRV 0020 *Introduction to Public Service* first in order to gain exposure to main theories and practices in the field. Normally the internship would be completed last; however, students should start planning their internship early and review their options with a CGS advisor.
- The internship requires 120 hours at the internship site along with registration for the PUBSRV 1900 course. Visit our Internships page for details.
- PUBSRV 1900 is a 3-credit course and may not be divided over two semesters. However, the student could work with their internship instructor to see if the 120 hours could be divided over two terms.
- Students who work at the University should consult with the PUBSRV internship instructor as to whether they need to complete internship hours outside of Pitt or in a different department on campus.
- PUBSRV 1910 Institute of Politics Internship/Seminar (4 cr.) may be used in place of PUBSRV 1900 Internship Seminar. Check with your CGS advisor prior to registering.

Gainful Employment Information

Writing Certificate

The Certificate in Writing is a 21-credit program designed for those who desire to improve their writing skills. In today's world, the skillful use of the written word is fundamental. This program consists of academic courses taught by faculty of the Department of English. Participants may choose electives to focus on a particular style of writing or to obtain an overview of several writing styles. The program also offers internships with local media, including newspapers, magazines, and television.

Who should participate:

- Students already enrolled in a degree program in the College of General Studies who wish to concentrate on the development of writing skills
- Those who already have a degree, but who wish to develop their writing skills for personal or professional advancement
- People seeking to embark upon writing as a profession

Upon completion of this certificate, participants will be able to:

- Write clearly and accurately
- Apply writing skills to both fiction and nonfiction works
- Understand different forms and techniques used in various types of writing

This certificate is applicable to fields such as media, industrial organizations, governmental agencies, community groups, service providers, and businesses. Skilled writers may work in any organization or field.

Admission requirements

Students must meet requirements for admission to the College of General Studies. A certificate application form must be completed and submitted to the College of General Studies online via https://www.cgs.pitt.edu/admission. To avoid a late fee, you should complete this process when registering for courses. Students must have completed a Seminar in Composition course or its equivalent before registering for any of the following classes.

Obtaining the certificate

To receive the certificate, you must fill out an application with your academic advisor prior to completing your last term in the program. Check with your advisor for the application filing form and deadlines, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Curriculum (21 credits)

In addition to Seminar in Composition, students must complete seven courses (21 credits). These classes should include two English writing courses (6 credits) and five English writing electives (15 credits).

- A minimum of five of the required seven courses must be completed at the University of Pittsburgh.
- No course will be accepted for certificate credit with a grade below C, and no course will be accepted as a prerequisite for a higher-level course if the grade earned is lower than a C

Required Courses (6 credits)

All courses are 3 credits.

- ENGWRT 0520 - INTRODUCTION TO FICTION WRITING
- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION

Electives (15 credits)

All courses are 3 credits.

Courses offered vary by term. Choose five additional courses from any combinations of poetry, fiction, and nonfiction. A sampling of courses that can be used to fulfill the certificate requirements include:

Poetry

- ENGWRT 0530 - INTRODUCTION TO POETRY WRITING
- ENGWRT 1210 - POETRY WORKSHOP

Fiction

- ENGWRT 1010 - INTERMEDIATE FICTION
- ENGWRT 1090 - MASTERING POINT OF VIEW
- ENGWRT 1091 - AUTOBIOGRAPHY AND CREATIVE IMPULSE
- ENGWRT 1092 - WRITER'S JOURNALS
- ENGWRT 1094 - READINGS IN CONTEMPORARY FICTION
- ENGWRT 1095 - TOPICS IN FICTION
- ENGWRT 1710 - SENIOR SEMINAR IN FICTION

Nonfiction

- ENGCMP 1103 - PUBLIC RELATIONS WRITING
- ENGCMP 1104 - CORPORATE STORYTELLING
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE
- ENGWRT 1390 - READINGS IN CONTEMPORARY NON-FICTION
- ENGWRT 1391 - WRITING THE REVIEW
- ENGWRT 1393 - SPORTS WRITING
- ENGWRT 1394 - SCIENCE WRITING
- ENGWRT 1399 - TOPICS IN NON-FICTION: NEWSPAPER
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA
- ENGWRT 1900 - INTERNSHIP: WRITING

Notes

Requirements subject to change. Check with an academic advisor before registering.

Writing for the Professions Certificate

In today's business climate, employees have discovered that the ability to research, organize, and write various kinds of documents is a critical component of many positions, including those that are primarily technical in nature. Organizations expect employees to communicate clearly and effectively with both colleagues and non-expert stakeholders.

This 18-credit certificate provides participants with a strong foundation for developing these vital writing skills. You will learn techniques that are critical for producing clearly written documents-critiquing, analyzing, and researching-as well as the practical applications that build on this groundwork.

Who should participate:

Individuals for whom writing will be a major component of their job responsibilities, e.g., broadcasters, legal professionals, or reporters.

Upon completion of this certificate, participants will be able to:

- Identify and analyze audience traits and perspectives
- Determine a specific goal and/or purpose of a document, then organize and develop clearly written prose in support of that purpose
- Apply concentrated knowledge of a specialized communication topic

This certificate is applicable to such fields as print and online writing professions, health professions, and nonprofit organizations.

Admission requirements

Students must meet requirements for admission to the College of General Studies. A certificate application form must be completed and submitted to the College of General Studies online at https://www.cgs.pitt.edu/admission. To avoid a late fee, you should complete this process when registering for courses.

Obtaining the certificate

To receive the certificate, you must fill out an application with your academic advisor prior to completing your last term in the program. Check with your academic advisor for the application filing form and deadline, and be sure all requirements for the certificate have been met. To avoid a late fee, you should complete this process when registering for the term.

Curriculum (18 credits)

- The Writing for the Professions certificate requires 18 credits, including 9 credits of core classes and 9 elective credits.
- Students must achieve a minimum grade of C (2.0) or better for all courses required for the program.
- Credits earned at other accredited institutions may be eligibile for transfer. However, a minimum of 9 credits must be earned at the University of Pittsburgh.

Required Courses (9 credits)

- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
  And choose one of the following courses:
- COMMRC 0320 - MASS COMMUNICATION PROCESS
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW

Electives (9 credits)

Choose three courses from the following:

- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION : Health Communication
- COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION : Media Relations or Communication and New Media Technologies
- ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS
- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0515 - PERSAUSIVE WRITING IN ADVERTISING
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0550 - TOPICS IN PUBLIC/PROFESSIONAL WRITING
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 1103 - PUBLIC RELATIONS WRITING
- ENGCMP 1111 - PROFESSIONAL WRITING IN GLOBAL CONTEXTS
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1400 - GRANT WRITING
- ENGCMP 1401 - WRITING FOR FUNDRAISING AND DEVELOPMENT
- ENGCMP 1420 - WRITING PROPOSALS FOR BUSINESS
- ENGWRT 0550 - FUNDAMENTALS OF NEWS REPORTING
- ENGWRT 1370 - JOURNALISM BOOT CAMP: WRITE NOW
- ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE
- ENGWRT 1391 - WRITING THE REVIEW
- ENGWRT 1393 - SPORTS WRITING
- ENGWRT 1399 - TOPICS IN NON-FICTION: NEWSPAPER
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA

Notes

Requirements subject to change. Check with an academic advisor before registering.

CGS Course Satisfier List

Please see the CGS General Education Requirements for completion of the Bachelor's degree. You may consult with your academic advisor in preparation for graduation.

Students that are interested in pursuing a second degree must complete all CGS degree and major requirements. These may be completed by combining CGS courses with transfer credits from previous academic course work.

For the second degree, students must complete a minimum of 30 credits in CGS, including at least half of the credits required for the new major (15-18 credits depending on the major).

Current course offerings for the College of General Studies, the Dietrich School of Arts and Sciences, and the College of Business Administration are listed in one location online for easy reference. Please see the Course Description page for more information.

Within PeopleSoft's Class Search, you can identify College of General Studies course offerings at-a-glance by their section number.

Visit the link below for a comprehensive list of courses that satisfy College of General Studies requirements.

Comprehensive Course List (CGS)

- Skills: Oral Communication
- Skills: Writing

For information on how to register, please visit the enrollment page.

Kenneth P. Dietrich School of Arts and Sciences

The Kenneth P. Dietrich School of Arts and Sciences is the oldest and largest academic unit within the University of Pittsburgh, with more than 11,000 students and over 1,000 faculty from around the world. The Dietrich School offers a competitive liberal arts education within the setting of a comprehensive research university and a dynamic urban setting.

The Dietrich School instructional programs provide a liberal arts curriculum designed to prepare students for the world of work, research, professional schools, and graduate programs. This education helps students cultivate the skills and knowledge that provide a foundation for lifelong learning, and educates students so that they can become perceptive, reflective, and intellectually self-conscious citizens of the world. The main elements of the Dietrich School general education are: an acquaintance with great works of art, literature, and philosophy; an understanding of social institutions and processes; a sense of history and familiarity with the richness and variety of human cultural achievements; an awareness of the main ideas of contemporary natural science and mathematics; and engagement with languages and cultures other than one's own.

Dietrich School Undergraduate Web site

Please visit www.asundergrad.pitt.edu for detailed information on:

- Dietrich School majors, minors, and certificates
- Dietrich School general education requirements
- Academic resources, services, and opportunities
- Additional policies and procedures for current Dietrich School students

Contact Information

University of Pittsburgh
Kenneth P. Dietrich School of Arts and Sciences
Office of the Associate Dean for Undergraduate Studies
140 Thackeray Hall
Pittsburgh, PA 15260
412-624-6480
Fax: 412-624-8265
studentrecords@as.pitt.edu

Dietrich School Undergraduate Calendar

www.asundergrad.pitt.edu/academic-calendar

Admission through the Office of Admissions and Financial Aid

The following students are admitted to Dietrich School by the Office of Admissions and Financial Aid. Please visit www.oafa.pitt.edu for more information.

- First-year students (see Pittsburgh campus First-Year Student Admissions for general admissions information).
- Transfer students who have previously enrolled at a college or university other than the University of Pittsburgh. These include former University of Pittsburgh students who have since earned college credits at another institution and now wish to return to the Dietrich School.
- Continuing education students: Adults who wish to begin or continue to work toward an undergraduate degree by taking a full- or part-time course load should apply as new or transfer students through the Office of Admissions and Financial Aid.
- Students who have previously earned a bachelor's degree from an institution other than the University of Pittsburgh and now wish to earn a second undergraduate degree.
- International students should refer to admission guidelines on the Office of Admissions and Financial Aid Web site.

Transfer Students/Transfer Credits

Previous course work for transfer students is evaluated by the Dietrich School Office of Student Records with respect to general education requirements. Before initial registration, transfer students receive an Undergraduate Degree Requirement Evaluation indicating which requirements they have satisfied and which ones must be completed in order to complete their degree in the Dietrich School.

Courses from other colleges and universities are evaluated according to the following guidelines:

- Courses must be passed with a grade of C or better and must be earned at an institution accredited by the appropriate regional accrediting association. Courses that have reasonable counterparts at the University are eligible for transfer. When requested, students are responsible for supplying descriptions for courses taken elsewhere.
- A maximum of 60 credits can be accepted from accredited community colleges and two-year junior colleges. A maximum of 90 credits can be accepted from accredited four-year institutions. All students must earn their final 30 credits toward a Dietrich School degree and at least half of the credits for their majors, minors, and/or certificates while enrolled as a Dietrich School student.
- The number of transfer credits granted for a given course cannot exceed the number awarded on the transcript of the original school or the number earned for the corresponding course in the Dietrich School. Credits earned on the quarter system will be converted into semester credits. A quarter credit is equal to two-thirds of a semester credit (e.g., five quarter-system credits equal three semester credits, and three quarter-system credits equal two semester credits).
- The Dietrich School accepts credits, but not grades, for transfer. Consequently, any courses that are accepted for transfer will be used as credit toward graduation, but will not be calculated into the student's GPA at the University of Pittsburgh.
- Transfer credits do not apply towards University honors.

Please contact the Dietrich School Office of Student Records at 412-624-6776 for information about transfer credit evaluation. Please note: All transfer credits may be subject to re-evaluation when a student transfers from one school to another within the University of Pittsburgh.

Admission through the Dietrich School of Arts and Sciences

The following students must apply directly to the Dietrich School for admission.

Transfers from Other University of Pittsburgh Schools at the Pittsburgh campus

To transfer to the Dietrich School from another school at the Pittsburgh campus, students should request that the other Pittsburgh campus school send their records to the Dietrich School. The Dietrich School will review the student records and send letters of acceptance to students who are eligible to transfer into the Dietrich School. To qualify, students must have a minimum overall GPA of 2.0 and have completed their basic skills requirements in composition and algebra according to Dietrich School guidelines. In addition, students enrolled in the College of General Studies (CGS) must earn at least 12 credits through CGS before applying for transfer to the Dietrich School.

Upon acceptance into the Dietrich School, students will receive evaluations of their previous course work, acknowledging the courses that have fulfilled Dietrich School skills and general education requirements. To graduate with a degree from the Dietrich School, students are required to earn their last 30 credits while enrolled in the Dietrich School and to earn at least half of the credits for their majors, minors, and certificates while enrolled in the Dietrich School.

Relocation from University of Pittsburgh Regional Campuses

1. For students seeking guaranteed relocation who have earned credits only from one of the regional campuses, the normal requirement is for completion of 45 credits at the specific regional campus, with a minimum GPA of 3.0.
2. For students seeking guaranteed relocation who have earned 30 or more credits at the specific regional campus and a total of 45 credits overall, a minimum GPA of 3.0 in all courses is required.
3. For students seeking relocation who have between 15 and 30 credits at the specific regional campus and a total of 45 credits overall, a minimum GPA of 3.0 is required in all courses, and the normal requirements of the Dietrich School of Arts and Sciences for external transfer students must be met. For these students, relocation is not guaranteed. Students must complete at least 15 credits at the regional campus to transfer to the Pittsburgh campus.
4. All students must complete the Algebra and Composition skills requirements before relocating from a regional campus.

Students Seeking a Second University of Pittsburgh Degree

Students who have earned a bachelor's degree in any University of Pittsburgh school or campus and wish to earn a second undergraduate degree in the Dietrich School should apply directly to the Dietrich School. Applicants should note the following:

- Course work for the second degree will continue to be recorded on the original University of Pittsburgh undergraduate transcript.

- All appropriate course work from the first degree will apply to the second degree.
- Students must earn a minimum of 30 new credits. No coursework repeated from the first degree will count toward the second degree.
- At least half of the credits for the second major toward the second degree must be earned while enrolled in the Dietrich School.
- The cumulative GPA and credit total will be based on all credits from the first degree and all new course work taken that applies to the second degree.

Students Seeking Reinstatement

The following students must apply for reinstatement through the Dietrich School of Arts and Sciences.

- Dietrich School students who have not enrolled for three consecutive terms (one calendar year);
- Dietrich School students who have completed their suspension periods and wish to continue their studies; and
- Students who last attended another school at the Pittsburgh campus but have not enrolled in classes for three consecutive terms (one calendar year), have not attended another institution, and wish to be admitted to the Dietrich School.

Students who are returning after completing their suspension period will be reinstated on probation.

The deadline for reinstatement is August 15 for the fall term, December 15 for the spring term, and one week before the beginning of classes in the summer term or summer session. Students who last attended another University of Pittsburgh school on the Pittsburgh campus or who attended a regional campus must meet the admissions requirements for transfer to the Dietrich School. Students' academic standing upon reinstatement will continue to be that attained at the end of their last term in residence.

Students who are reinstated for a particular term but do not enroll for that term must apply for reinstatement again if they wish to attend for a later term. Students who have been away from the University for two or more years will be subject to the requirements of the school and of their major at the time of their reinstatement, rather than those in place at the time of their last attendance.

Post-baccalaureate Students

Students who have completed an undergraduate degree and wish to take additional undergraduate courses on a non degree-seeking basis may apply directly to the College of General Studies.

Academic Integrity

As members of the University of Pittsburgh community, Dietrich School students are expected to meet their obligation to exhibit honesty and to respect the ethical standards of the University community and of their chosen field of study in carrying out academic assignments. Dietrich School students are therefore expected to familiarize themselves with the published rules and regulations governing academic integrity. For specific information, see the Academic Integrity Code.

The Dietrich School maintains an Academic Integrity Board, consisting of both faculty and students, for adjudication of grievances from faculty about student behavior and from students about faculty behavior.

Grading Policies

Letter Grade Option

The Dietrich School adheres to the following University letter grade system without exception.

A+		
A	4.00	Superior
A-	3.75	
B+	3.25	Meritorious

B	3.00	
B-	2.75	
C+	2.25	
C	2.00	Adequate
C-	1.75	
D	1.25	
D+	1.00	Minimal
D-	0.75	
F	0.0	Failure

S/NC Grade Option

The Dietrich School offers both a standard letter-grade option and the Satisfactory/No-Credit (S/NC) option for students enrolled in most Dietrich School courses. Under the S/NC option, a student who does satisfactory work (a grade of C or better) in a course receives the grade of S. If the student's work is not satisfactory (a grade of C- or lower), the grade of NC (no credit) is given. Courses for which an S is earned are counted toward graduation but are not computed in the GPA. Courses for which an NC is earned are not counted toward graduation or the GPA, since the NC designates that no credit has been earned.

Students can select the S/NC grade option when enrolling for a course. After the end of the add/drop period, a student must complete a Grade Option/Audit Request form and submit it to the Office of Student Records by the Grade Option deadline noted each term on the Dietrich School undergraduate calendar.

Note: There are some formal limitations to a student's choice of grading systems; he or she should check with an academic advisor before deciding to take a course S/NC.

Audit (N Grade)

To audit a course, a student must register for and pay tuition for the course. A Grade Option/Audit Request form must be submitted for undergraduate courses by the grade option change deadline noted each term on the Dietrich School undergraduate calendar. The instructor for the course must sign the Grade Option/Audit Request form before the form can be processed. Completed forms must be submitted to the Office of Student Records. Students who audit a course are given an N grade, which means that the course is counted neither towards graduation nor the GPA. A student typically chooses to audit a course for personal enrichment.

G Grades

At the discretion of an instructor, a G grade may be awarded when students who have been attending a course and making regular progress are prevented from completing the course due to extenuating personal circumstances. Students who are assigned a G grade are required to complete course requirements no later than one year after the term or session in which the course was taken, or by an earlier deadline established by the instructor. After that year, the grade will automatically change to NG; an NG grade cannot be changed, and the credits will no longer appear as "in progress." The student will be required to re-register for the course if it is needed to fulfill requirements for graduation. The Dietrich School encourages students with G grades to work with their instructors to complete the requirements for the course as soon as possible.

Academic Honors

Outstanding students in the Dietrich School are recognized for their academic achievement in several ways.

Dean's List

After grades are posted for the fall and spring term, Dietrich School students whose academic performance indicate outstanding achievement are recognized on the Dean's List. To be placed on the Dean's List, a student must have earned at least 12 letter grade credits (not including courses taken on the Satisfactory/No-Credit option) with a term GPA of at least 3.50 and no grade lower than a C.

University Honors

Those members of a Dietrich School graduating class who have attained an outstanding scholastic record and have completed at least **60 letter-graded credits** at the University of Pittsburgh are graduated with honors. All coursework completed at the University for a letter grade is calculated in the grade point average. University honors are awarded in the following levels of distinction according to grade point average at graduation:

- Summa Cum Laude: 3.75
- Magna Cum Laude: 3.50
- Cum Laude: 3.25

Departmental Honors

Many departments offer an honors major. Successful completion of the honors major, as well as normal graduation requirements, lead to the awarding of the bachelor's degree with departmental honors. For detailed information, contact the departmental advisor or visit the department's Web site.

Academic Standing

The Dietrich School is committed to the success of its students and has guidelines in place to connect students with the appropriate resources at the earliest sign of academic difficulty. A student's academic standing is comprised of three factors: term GPA, cumulative GPA, and progress toward a degree. Students in the Dietrich School are expected to maintain a cumulative GPA and term GPA of 2.00 or above for each term of enrollment. In addition, full-time students are expected to successfully complete a minimum of 12 credits during each term of enrollment. Part-time students are expected to successfully complete a minimum of 3 credits during each term of enrollment.

Academic Alert is a marker designed to notify students who show signs, early on and throughout their academic career, of jeopardizing successful progress toward the completion of their undergraduate degree. This may be due to their inability to maintain a satisfactory GPA and/or failing to fulfill the algebra or composition requirement within the first two terms of full-time enrollment. Students who receive two consecutive **Academic Alerts** will be placed on **Academic Probation**.

Students are placed on **Academic Probation** after earning a GPA between a 1.50 and a 1.99 over two consecutive terms or have one semester at or below a 1.49 cumulative GPA. Students may also be placed on Academic Probation if they fail to make progress toward their degree (e.g. failing to earn any academic credits).

Students currently on Academic Probation who earn a term GPA below a 2.00 or fail to make progress toward their degree will be subject to **Academic Suspension**. After being suspended, students are not eligible to re-enroll for one calendar year. Following suspension, students are required to apply for reinstatement at the Dietrich School Undergraduate Dean's Office. Students returning from academic suspension are reinstated on academic probation and are required to develop an academic success plan upon their return. These reinstated students' records are reviewed after each subsequent term of enrollment.

Students who have been reinstated from Academic Suspension must earn at least a 2.00 GPA for each term that they enroll until they have achieved a cumulative GPA of a 2.0 or above. If a student fails to earn a 2.00 term GPA, they are subject to **Academic Dismissal** from the University. Dismissed students are not eligible for reinstatement.

Probation and Eligibility for Financial Aid

The Office of Admissions and Financial Aid (OAFA) monitors financial aid eligibility. Students on probation should contact OAFA at 412-624-7488 for more information.

Credit Policies

The following section details the Dietrich School's rules regarding allowable credits and courses for students earning a degree in the Dietrich School.

Advanced Placement (AP) Credits

See the AP credit section of the Office of Admissions and Financial Aid Web site.

College Level Examination Program (CLEP) Testing

The Dietrich School does not award credits based on CLEP tests.

Summer Courses Taken Elsewhere

Dietrich School students in good academic standing (cumulative GPA of at least 2.00) may attend a summer or special session of another accredited institution in order to supplement their program, provided they receive prior approval from the Dietrich School Office of Student Records. Students must submit a completed summer course approval form (available on the Student Records Web site), as well as the relevant course descriptions to the Office of Student Records. Students may not repeat any course taken at the University of Pittsburgh (passed or failed) at another institution. A maximum of two courses (no more than 8 credits) may be taken in a single period of enrollment elsewhere.

Credit by Examination

In rare circumstances, credit by examination may be offered. Contact the Office of Students Records (studentrecords@as.pitt.edu or 412-624-6776) with questions.

Departmental Credits

No more than 60 credits may be taken in one department, and normally no more than 40 in a single department are considered desirable in a well-balanced program.

Repeating a Course/Duplication of Course Content

If a student repeats a course, they must complete a course repeat form and submit it to the Office of Student Records. Please note the following.

- The original grade remains on the transcript, but is not counted in the calculation of the GPA.
- Any grade earned in the repeated course will be factored into the GPA, even if it is lower than the original grade.
- The repeated course does not increase the number of credits counted toward meeting degree requirements unless an F is replaced by a passing grade.
- W, R, N, or NC grades reported for the repeated course will not be identified as a course repeat, thus the original grade earned will continue to be counted in the GPA. Incomplete (G) grades will not be identified as repeated courses until the course work is completed.
- No sequential course may be repeated for credit after a higher numbered course in that sequence has been passed with a C or higher grade.
- No course can be repeated at any other institution.
- Students may repeat a course no more than two times.

Students may not earn duplicate credit for courses that substantially duplicate the content of courses taken previously. For example, duplicate credit cannot be earned for the following:

- Both a regular version of a course and an honors version of that course.
- Courses that are cross listed with a course the student has already taken.
- Courses taken under a newly assigned course number if already taken under an old course number.
- Certain specific courses that duplicate material.

Students with questions about repeating courses or duplicating course content should consult with their academic advisors.

English Language Institute Courses

LING 0007, LING 0008, and LING 0009 courses count toward the degree but are not counted toward a linguistics major.

Enrollment in Graduate Courses

Undergraduate Dietrich School students who demonstrate exemplary competencies and proficiencies may take advantage of the rich variety of graduate courses offered by the Dietrich School. Credits earned in graduate courses may count toward the degree. Students should consult with both their academic advisor and instructor of a course before registering.

Independent Study, Undergraduate Research, Internships, and Undergraduate Teaching

Dietrich School students may earn up to 24 credits of independent study, undergraduate research, internships, and undergraduate teaching as part of the 120 credits required for a degree. Ordinarily, no more than six credits may be earned in any term in a single undergraduate research experience or internship. Under certain conditions, students in good standing may register for a block of 15 credits of independent study. These credits are to be earned for work done within one academic term. A student may register for a 15-credit independent study term only once during his or her college career. This needs to be approved by an assistant dean prior to registration.

Learning Agreement forms for independent study, undergraduate research, and internships, as well as specific information about eligibility, procedures, and guidelines, are available from the academic department through which the activity will be conducted.

International Baccalaureate

The Dietrich School recognizes the International Baccalaureate (IB) Higher-Level Examinations and may grant advanced standing and/or credit for various fields for scores on the Higher-Level Examinations, which range from five to seven. Advanced standing is determined individually by subject according to departmental policy. Students should send the results of their IB examinations directly to the Office of Student Records. No credit will be given for Subsidiary-Level Examinations.

Lower-Level or Sequential Courses

Credit cannot be earned for courses taken after more advanced course work in the same field has been successfully passed with a C or higher. For example, credit cannot be earned for an algebra course taken after the successful completion of a calculus course.

Normal Credit Load

A normal credit load is 12 to 18 credits per academic term (e.g. fall and spring). Students should complete a minimum of 15 credits per term in order to graduate within four years.

Any term in excess of 18 credits requires the recommendation of the student's academic advisor and approval from an assistant dean. Call 412-624-6480 to make an appointment with an assistant dean. Students who enroll for more than 18 credits in a term will be charged additional tuition per credit.

Physical Education

Students are not required to take any courses in physical education (PEDC), but they may do so. Up to four credits of courses offered by the School of Education's Department of Health, Physical, and Recreation Education may be counted toward a Dietrich School degree.

Reserve Officer Training Corps (ROTC)

Credits earned in aerospace science (Air Force ROTC), military science (Army ROTC), or naval science (Navy ROTC through cross registration at Carnegie Mellon University [CMU]) are not accepted toward a Dietrich School degree. The Dietrich School will grant up to four credits toward graduation for the following military science courses in lieu of physical education and recreation courses: AFROTC 0001, AFROTC 0002, AFROTC 0003, and AFROTC 0004; MILS 0011, MILS 0021, MILS 0022, MILS 1031, MILS 1032, MILS 1041, and MILS 1042. Any four credits of Navy ROTC courses from CMU will count in lieu of physical education and recreation courses.

Statute of Limitations

All of the credits required for a degree, whether earned in residence or transferred from another institution, must have been earned within 12 years prior to the date on which the degree is awarded. However, when given evidence that the previous courses still provide adequate preparation for courses yet to be taken and still represent a reasonable part of the total academic program, this limitation may be waived. In such cases, the waiver is for a specific period during which the program must be completed.

Online Courses

Students may count a maximum of 24 credits of online coursework completed at Pitt toward their degree. First-year students may not take online courses in their first term. For students who begin in the summer or fall, they may not take online courses until the spring. For students who begin in the spring, they may not take online courses until the summer.

Adding and Dropping Courses

Generally, students enrolled in the Dietrich School are not required to have their academic advisor's approval before adding or dropping a course. However, Student Support Services (SSS) students and student athletes must see their academic advisor before processing an add/drop. Additionally, all first-year students are strongly urged to consult their academic advisor before adding or dropping a course.

Withdrawing from Courses

First-year students are required to see their academic advisor before withdrawing from any course. In addition, any student considering withdrawing from a course that fulfills either the composition or the algebra requirement must first see an assistant dean (please call 412-624-6480 to schedule an appointment). Withdrawing from one or more courses may impact a student's financial aid status. Withdrawal from a course must be done by the withdrawal deadline, which is posted in the Dietrich School undergraduate calendar and on the Office of the University Registrar's Web site.

Bachelor Degree Requirements

The following sections describe the general requirements for all majors offered by the Dietrich School.

Graduation Requirements

To graduate from the Dietrich School, students must earn at least 120 degree credits with a minimum 2.00 GPA. In addition, students must achieve a 2.00 GPA both in the major and in the minor or certificate. Within the 120 credits, students must fulfill the Dietrich School's curriculum requirements, which include General Education Requirements and requirements for a major, minor, or certificate (see General Education Requirements, and Requirements for Major sections below). Furthermore, students must earn at least half of the credits for their major(s), minor(s), and certificates(s) and the final 30 credits toward the Dietrich School degree while enrolled as a Dietrich School student.

Graduation Application

Students must file an application for graduation with the Office of Students Records by a specified deadline prior to the term during which they expect to complete all requirements (i.e., a student who expects to graduate at the end of the spring term must apply before the end of the immediately preceding fall term; see the Dietrich School undergraduate calendar each term for application deadlines). This permits Student Records to make a complete appraisal of the student's record before the student begins the coursework of the final term. Any deficiency discovered during the evaluation will be communicated to the student by email, and should be promptly corrected either in conference with the departmental advisor at registration or during the add/drop period in the final term. The caps, gowns, and hoods for the commencement ceremony are purchased through the University Store on Fifth. Diplomas are mailed through the Registrar's Office.

General Education Requirements

The Dietrich School of Arts and Sciences is committed to providing the best possible education for its undergraduate students. This education is best served through a clear and innovative curriculum that provides students with the knowledge, analytical skills, disciplinary understanding, intellectual curiosity, and creative opportunities that will allow them to engage and adapt in an increasingly diverse and rapidly changing world. Diversity and inclusion are part of the core mission of our school and the university and are key matters for our students and society. Of allied importance is the understanding of complex global issues and different cultures.

All students graduating from the Dietrich School must satisfy general education requirements detailed below. Students select from a range of approved courses to meet these requirements.

A. Writing

Written communication is central to almost all disciplines and professions. Developing writing proficiency is a lifelong process, and it is especially important that undergraduate education accelerates and directs that process toward the achievement of writing skills that will provide a base appropriate for professional or graduate education or for professional employment. The school requires that all students complete the following writing courses during their undergraduate career.

1. Composition

Students must complete the composition requirement, ENGCMP 0200 Seminar in Composition or its equivalent, with a minimum grade of C- by the end of their first year of study. Part-time students should complete the requirement within their first 30 credits. Transfer students must complete this requirement within their first 15 credits.

Based on placement, students may be required to complete ENGCMP 0150 Workshop in Composition (or its equivalent) prior to enrolling in ENGCMP 0200. Students may be exempt from the composition requirement with a 660 or above Evidence-Based Reading and Writing SAT score or an ACT English score of 27 and a 5 on the AP English: Language and Composition or AP English: Literature and Composition.

2. Two Writing-Intensive Courses

Writing intensive courses (W-Courses) are designed to teach writing within a discipline through writing assignments that are distributed across the entire term. In these courses, students will produce at least 20-24 pages of written work. A significant portion of this work should be substantially revised in response to instructor feedback and class discussion.

All students must complete two courses that are designated as W-Courses, or one W-Course and a second English composition course. Students must satisfy one element of this requirement within their major field of study. W-Courses may also be courses that fulfill other General Education Requirements.

B. Algebra and Quantitative and Formal Reasoning

1. Algebra

Students must complete the algebra requirement, MATH 0031 College Algebra or its equivalent, with a minimum grade of C- by the end of their first year of study. Part-time students should complete the requirement within their first 30 credits. Transfer students must complete this requirement within their first 15 credits. Students will be exempt from the algebra requirement with a 620 or above Math SAT score or a 27 or above Math ACT score.

2. Quantitative and Formal Reasoning

All students are required to take and pass with a minimum grade of C- at least one course in university-level mathematics (other than trigonometry) for which algebra is a prerequisite, or an approved course in statistics or mathematical or formal logic in a department of the Dietrich School of Arts and Sciences.

C. Language

A Sequence of Two Courses in a Second Language

All students are required to complete with a minimum grade of C- two terms of university-level study in a second language other than English. Exemptions will be granted to students who can demonstrate elementary proficiency in a second language through one of the following:

1. Having completed three years of high school study of a second language with a grade of B or better in each course;
2. Passing a special proficiency examination;
3. Transferring credits for two terms or more of approved university-level instruction in a second language with grades of C or better;

4. Having a native language other than English.

D. Diversity

Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, ability difference, and/or economic disparity.

All students must complete one course that is designated as a Diversity course but may take this course within their major field of study. Diversity courses may also be courses that fulfill other General Education Requirements.

E. Division Requirements in the Humanities and Arts, Social Sciences, Natural Sciences

Each student is required to take nine courses in the humanities, social sciences, and natural sciences distributed as below. Such courses allow students to pursue their own interests while they explore diverse views of a broad range of human cultures, modes of thought, and bodies of knowledge. The courses that fulfill these requirements are truly courses in the disciplines that draw on the unique resources of a research university.

1. A Course in Literature

By studying a range of literary and other texts in this course, students will be introduced to the techniques and methods of textual analysis and will develop critical perspectives on a variety of forms of cultural expression.

2. A Course in the Arts

This course introduces students to modes of analysis appropriate to music, theatre, or the visual and plastic arts. It may take the form of a survey, the study of a genre or period, or may focus on a particular artist.

3. A Course in Creative Work

In this course students are expected to produce some form of creative work, and they will also be trained in the techniques and modes of its production. The course could be situated in theatre, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

4. A Course in Philosophical Thinking or Ethics

This course will emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

5. A Social Science Course

A course that treats topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners.

6. A Course in Historical Analysis

In this course, students will develop skills and methods by which to understand significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.

7. Three Courses in the Natural Sciences

These will be courses that introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline. The courses may be interdisciplinary, and no more than two courses may have the same primary departmental sponsor.

F. Global Awareness and Cultural Understanding

Each student must complete three courses in global awareness and cultural understanding distributed as below.

1. A Course in Global Issues

This course will examine significant issues that are global in scale. Courses could address, for example: globalization; the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law, or the economy.

2. A Course in a Specific Geographic Region

This course will be an in-depth study and analysis of a particular region or locality outside of the United States.

3. A Course in Cross-Cultural Awareness

This course, through cross-cultural perspective, will promote knowledge of and reflection upon the cultures of Asia, the Middle East, Africa, Latin America, the Caribbean, or the indigenous peoples of the world past and present. Students will develop an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.

Overlapping Credit Within the Dietrich School

Up to eight credits may be overlapped between any two majors, two certificates, and/or a major and certificate. Up to eight credits may be overlapped between a major and minor and/or certificate and minor. Up to four credits may be overlapped between two minors.

Allowable credit overlap	**Major**	**Certificate**	**Minor**
Major	8 credits	8 credits	8 credits
Certificate	8 credits	8 credits	8 credits
Minor	8 credits	8 credits	4 credits

The academic advisement report (AAR) will not be able to catch excessive overlap; advisors and students will need to continue to monitor overlapping credits.

Requirements for the Major

All students are required to complete a major of their choice, in addition to general education requirements, in order to graduate from the Dietrich School. The Dietrich School offers over 55 majors in 30 departments. Some departments offer more than one major. Each department specifies the particular courses needed to fulfill its major(s).

Students must complete the major with a 2.00 GPA, and half of the credits earned for the major must be earned at the University of Pittsburgh main campus.

Students declare their major by filling out an Academic Plan Change Form. Students normally declare their major during their fourth term of full-time study.

Note: Transfer students receive an evaluation of their previous course work indicating the equivalent University of Pittsburgh courses for which transfer credits have been awarded. Equivalent Dietrich School courses will meet requirements for the major where appropriate. Students who believe that a previous course not equivalent to a Dietrich School course should meet a requirement for a major may petition the department to review that course.

Minors and Certificates

Minors and certificates are earned in addition to a major. Students must complete minors and certificates with a 2.00 GPA, and half of the credits earned for the minor or certificate must be earned at the University of Pittsburgh main campus. Students may overlap a courses to fulfill requirements between a major, a minor, and/or a certificate in the following manner. Students who complete an approved minor or certificate will have it listed on their transcript, provided that the minor or certificate is indicated on the application for graduation.

Special Academic Opportunities

Dietrich School students may choose to pursue a variety of academic programs leading to multiple majors, majors within more than one department, or majors that either prepare students for or offer advanced admission to graduate or professional programs at the University of Pittsburgh.

Double and Triple Majors

Students can declare a double or triple major, but will usually earn only one degree. If one major leads to the BA degree and another to the BS degree, students must decide when applying for graduation which degree they wish to receive.

Dietrich School of Arts and Sciences/Business Dual Major

Qualified students may apply for admission to a Dietrich School of Arts and Sciences/ Business dual major. The dual major allows students to complement a Dietrich School major with a solid foundation in business. Students may apply to the program after their first year at the University of Pittsburgh.

Double Degrees

Dietrich School students may choose to simultaneously pursue more than one undergraduate degree, either within the Dietrich School (i.e., both a BA and a BS) or in another undergraduate school of the University. In general, earning two degrees requires a minimum of 150 credits and the completion of the curriculum requirements of both schools.

Combined Degree Options

These intensive programs give Dietrich School students the opportunity to complete their undergraduate degree while beginning their first year of a graduate or professional program. To qualify, students must:

- Complete 96 or more Dietrich School credits,
- Satisfy all of the general education requirements, and
- Be accepted into a graduate or professional school at the University of Pittsburgh.

Preparation for Professional Programs of Study

Students interested in spending their junior and senior years in the University of Pittsburgh's professional schools of Social Work, Health and Rehabilitation Sciences, or Pharmacy normally spend two years in the Dietrich School taking necessary prerequisite courses and electives in preparation for professional study. Although first-year students are accepted directly into the schools of Engineering, Nursing, Computing and Information, and the College of Business Administration (CBA), it is possible for students who begin in the Dietrich School to transfer into those schools after one or two years.

Preparation for Graduate Professional Studies

Although the Dietrich School does not offer specific majors in pre-law, pre-medicine, pre-dental medicine, or education, it is possible for students in the Dietrich School to complete all the necessary prerequisites for entry into these graduate professional schools while fulfilling their Dietrich School degree requirements.

Accelerated Law Admissions Program (ALAP)

The Accelerated Law Admissions Program (ALAP), open to any student enrolled in the Dietrich School, grants admission to the University of Pittsburgh's School of Law to those students who meet the ALAP's requirements. Students who enter the program complete their undergraduate major in three years, applying for admission to the School of Law during their junior year, and then go on to law school for another three years.

Students interested in the program are encouraged to declare a major early at the end of the first year in order to allow them to complete their undergraduate Dietrich School major(s) by the end of their third year. Also, interested students are encouraged to take summer classes during their second year in order to reduce the credits to be completed in their third year. The requirements for the ALAP are as follows:

- Students must complete 102 credits by the end of their junior year.
- Students must take three writing-designated courses (rather than two) beyond the freshman writing requirement.
- Students must take the Law School Admissions Test (LSAT) by the fall of their junior year. This would include the June, October, or December test.

Acceptance into the program is competitive, and only those students with above-average grades and competitive LSAT scores should apply.

Five-Year Program

- BS in statistics and an MA or MS in applied statistics: This program is intended to give outstanding students interested in statistics the opportunity to progress quickly toward their educational objectives. Contact the Department of Statistics for details.

Study Abroad

Dietrich School students are encouraged to add an international dimension to their undergraduate education through study abroad. Credit may be earned toward the Dietrich School degree through participation in one of several University of Pittsburgh programs or consortia-sponsored programs. Students may study in virtually any part of the world in these programs or others sponsored by most American or international institutions.

Visit the Study Abroad Web site at www.abroad.pitt.edu for more information.

Dietrich School Faculty

Dietrich School of Arts and Sciences Faculty

Programs and Course Offerings

Major

Interdisciplinary Studies, BA

The Interdisciplinary Studies major is an alternative to the traditional majors in the Dietrich School of Arts and Sciences. It provides a coherent course of study with the breadth and depth appropriate to a Dietrich School major, while offering a pathway to degree completion.

Interdisciplinary Studies Major

Regulations

1. Each Interdisciplinary Studies major should consist of at least 42 credits of work earned in courses from at least two Dietrich School departments. The major should aim for integrated and cumulative learning. To this end, each major must have the following characteristics:
    1. At least 21 credits must be earned from courses numbered 1000 or above;

    2. Courses must be arranged in at least two clusters or thematic groupings;
    3. Each cluster must contain a minimum of 15 credits;
    4. A writing (W) course approved by an assistant dean must be completed as part of the major.
2. Up to six credits of independent study, directed reading, directed research, undergraduate teaching, and internships may be counted toward the major.
3. A student wishing to pursue an Interdisciplinary Studies major must work with an assistant dean, who will serve as the student's academic advisor. The assistant dean's responsibilities include:
    1. Approving the student's Interdisciplinary Studies major proposal;
    2. Approving changes to the proposal;
    3. Providing academic advising to the student at least once per term.
4. The following additional requirements apply:
    1. Students are eligible to declare the Interdisciplinary Studies major after successful completion of 75 credits;
    2. A minimum 2.0 GPA must be maintained for all Interdisciplinary Studies coursework; Only grades of C- or above may be counted toward the major;
    3. Students may achieve honors in Interdisciplinary Studies by earning a minimum GPA of 3.5 in the courses for the major and a 3.5 cumulative GPA;
    4. All regular Dietrich School degree requirements must be satisfied (e.g. minimum 120 credits, General Education Requirements, 2.0 overall GPA, at least half of the credits used to fulfill the major must be completed at the Pittsburgh campus).
    5. Students may not double major when pursuing the Interdisciplinary Studies major.
    6. Students wishing to earn a Bachelor of Science degree must complete 21 credits of upper-level science coursework (certified by the assistant dean) and MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1 or STAT 1000 - APPLIED STATISTICAL METHODS .

Procedures

1. A student wishing to declare an Interdisciplinary Studies major should meet with an assistant dean from the Office of the Associate Dean for Undergraduate Studies, 140 Thackeray Hall. Please call 412-624-6480 to make an appointment.
2. The student should draft a proposal to explain the proposed course of study. The proposal should include:
    1. Learning outcomes and a rationale for the course of study
    2. A list of courses used toward the major
    3. A discussion of the career options that may be pursued utilizing this combination of courses
3. The proposal must be approved by an assistant dean and submitted to the Associate Dean for Undergraduate Studies for final approval.

Interdisciplinary Studies, BS

The Interdisciplinary Studies major is an alternative to the traditional majors in the Dietrich School of Arts and Sciences. It provides a coherent course of study with the breadth and depth appropriate to a Dietrich School major, while offering a pathway to degree completion.

Interdisciplinary Studies Major

Regulations

1. Each Interdisciplinary Studies major should consist of at least 42 credits of work earned in courses from at least two Dietrich School departments. The major should aim for integrated and cumulative learning. To this end, each major must have the following characteristics:
    1. At least 21 credits must be earned from courses numbered 1000 or above;
    2. Courses must be arranged in at least two clusters or thematic groupings;
    3. Each cluster must contain a minimum of 15 credits;
    4. A writing (W) course approved by an assistant dean must be completed as part of the major.
2. Up to six credits of independent study, directed reading, directed research, undergraduate teaching, and internships may be counted toward the major.
3. A student wishing to pursue an Interdisciplinary Studies major must work with an assistant dean, who will serve as the student's academic advisor. The assistant dean's responsibilities include:
    1. Approving the student's Interdisciplinary Studies major proposal;
    2. Approving changes to the proposal;
    3. Providing academic advising to the student at least once per term.
4. The following additional requirements apply:
    1. Students are eligible to declare the Interdisciplinary Studies major after successful completion of 75 credits;
    2. A minimum 2.0 GPA must be maintained for all Interdisciplinary Studies coursework; Only grades of C- or above may be counted toward the major;
    3. Students may achieve honors in Interdisciplinary Studies by earning a minimum GPA of 3.5 in the courses for the major and a 3.5 cumulative GPA;

4. All regular Dietrich School degree requirements must be satisfied (e.g. minimum 120 credits, General Education Requirements, 2.0 overall GPA, at least half of the credits used to fulfill the major must be completed at the Pittsburgh campus).
5. Students may not double major when pursuing the Interdisciplinary Studies major.
6. Students wishing to earn a Bachelor of Science degree must complete 21 credits of upper-level science coursework (certified by the assistant dean) and MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1 or STAT 1000 - APPLIED STATISTICAL METHODS .

Procedures

1. A student wishing to declare an Interdisciplinary Studies major should meet with an assistant dean from the Office of the Associate Dean for Undergraduate Studies, 140 Thackeray Hall. Please call 412-624-6480 to make an appointment.
2. The student should draft a proposal to explain the proposed course of study. The proposal should include:
    1. Learning outcomes and a rationale for the course of study
    2. A list of courses used toward the major
    3. A discussion of the career options that may be pursued utilizing this combination of courses
3. The proposal must be approved by an assistant dean and submitted to the Associate Dean for Undergraduate Studies for final approval.

International and Area Studies, BPHIL

The University Honors College (UHC) and University Center for International Studies (UCIS) have created the Bachelor of Philosophy in International and Area Studies (BPhil IAS), a research-based undergraduate major that will help students meet the demands of today's world. The BPhil IAS degree is awarded jointly by the student's home school and the University Honors College and is the first undergraduate degree in international studies at Pitt.

The goal of the BPhil IAS degree is to enable students to think critically about their global world and to gain "global competence," which involves working effectively in different international settings, an awareness of the major currents of global change and the resulting issues raised, the capacity for effective communication across cultural and linguistic boundaries, and personal adaptability to diverse cultures.

Students seeking the BPhil IAS degree must have a minimum GPA of 3.50/4.00; complete an approved program of study involving coursework, second language, and study abroad; and write and publicly defend their research thesis before a faculty examining board that includes a visiting faculty member from outside the University. The BPhil IAS is not a freestanding major, as it requires the student to combine the BPhil IAS with a major in the student's home school of admission (A&S, CBA, Engineering, etc.); students must combine the BPhil IAS requirements with all curriculum requirements for a degree in their home school of admission.

Students seeking the BPhil in IAS must:

- have a minimum grade point average of 3.50/4.00; and
- complete eight approved courses (24 credits); and
- complete one methods course specific to their second major or to their BPhil thesis research topic; and
- complete one directed study course related to their BPhil thesis research topic; and
- complete three years of college-level language study or equivalent proficiency in a language relevant to their BPhil thesis research topic; and
- write and publicly defend their research thesis (the BPhil thesis) before a faculty examining board that includes a visiting faculty member from outside the University; and
- complete a second major in another academic discipline (note that only two courses from this major can overlap with the approved courses for the IAS major).

Students interested in the BPhil in IAS may complete one of the following tracks in UCIS: Asian Studies, European Union Studies, Global Studies, Latin American Studies, or Russian and East European Studies

Joint Major

A&S/Business, BA

A&S/Business Dual Major

The A&S/business dual major is offered jointly by Dietrich School of Arts and Sciences and the College of Business Administration (CBA). To satisfy the requirements, students must combine the business major with any Dietrich School major. The Dietrich School major will be listed first on the transcript as the degree-determining major (BS or BA), and the business major will be listed second. Students will be required to fulfill all Dietrich School curriculum requirements. Students are admitted by a faculty committee that considers the cumulative GPA, specific courses taken and grades earned, SAT scores, and other relevant credentials. Students who have completed at least one full year of course work are eligible to apply

to the program. Students interested in the program should seek assistance from their Dietrich School advisors regarding the application process. For more information about the program, see http://www.business.pitt.edu/cba/academics/.

Major Requirements

To graduate with an A&S/business dual major, students must complete the following:

Four dual major prerequisites:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

- MATH 0120 - BUSINESS CALCULUS or
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

Note:

Competency in Microsoft Excel (spreadsheet software) is required.

Twelve required business courses:

- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING
- BUSQOM 0050 - QUANTITATIVE METHODS
- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSECN 1010 - MANAGERIAL ECONOMICS
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSFIN 1030 - INTRODUCTION TO FINANCE
- BUSMKT 1040 - INTRODUCTION TO MARKETING
- BUSHRM 1050 - HUMAN RESOURCES MANAGEMENT
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Note:

All of the above listed courses must be completed with an average GPA of 2.00. All courses for the business major must be taken on a letter-grade basis.

A&S/Business, BS

A&S/Business Dual Major

The A&S/business dual major is offered jointly by Dietrich School of Arts and Sciences and the College of Business Administration (CBA). To satisfy the requirements, students must combine the business major with any Dietrich School major. The Dietrich School major will be listed first on the transcript as the degree-determining major (BS or BA), and the business major will be listed second. Students will be required to fulfill all Dietrich School curriculum requirements. Students are admitted by a faculty committee that considers the cumulative GPA, specific courses taken and grades earned, SAT scores, and other relevant credentials. Students who have completed at least one full year of course work are eligible to apply to the program. Students interested in the program should seek assistance from their Dietrich School advisors regarding the application process. For more information about the program, see http://www.business.pitt.edu/cba/academics/.

Major Requirements

To graduate with an A&S/business dual major, students must complete the following:

Four dual major prerequisites:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

- MATH 0120 - BUSINESS CALCULUS or
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

Note:

Competency in Microsoft Excel (spreadsheet software) is required.

Twelve required business courses:

- BUSACC 0030 - FINANCIAL ACCOUNTING
- BUSACC 0040 - MANAGERIAL ACCOUNTING
- BUSQOM 0050 - QUANTITATIVE METHODS
- BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT
- BUSECN 1010 - MANAGERIAL ECONOMICS
- BUSORG 1020 - ORGANIZATIONAL BEHAVIOR
- BUSFIN 1030 - INTRODUCTION TO FINANCE
- BUSMKT 1040 - INTRODUCTION TO MARKETING
- BUSHRM 1050 - HUMAN RESOURCES MANAGEMENT
- BUSQOM 1070 - OPERATIONS MANAGEMENT
- BUSSPP 1080 - STRATEGIC MANAGEMENT

Note:

All of the above listed courses must be completed with an average GPA of 2.00. All courses for the business major must be taken on a letter-grade basis.

Certificate

Children's Literature Certificate

Books written for children are among the best-loved and best-remembered of all works of literature. They also provide some of the most important early learning experiences. In recent years, books written for children have attracted increasing interest from scholars and students as well as parents, educators, publishers, and journalists. What kinds of stories do we consider appropriate for children, and why? How have our opinions about this topic changed over time and across different cultures? And how is literacy changing, now that children are exposed not only to books, films, and television, but also to video games and the world wide web?

The interdisciplinary Certificate in Children's Literature offers undergraduates the opportunity to bring together studies across a broad range of subjects as they contemplate these and other questions pertaining to youth literature and culture. Founded in 1981, the program is designed to meet the individual student's interests and strengths and fulfills the Arts and Sciences requirement for a related area. The Children's Literature Certificate provides a useful background for many areas of professional work and study. Many of our students pursue careers in elementary, secondary, and special education, or in information science, child care, or social work. Others students have gone to graduate school in the humanities (English, History, Film Studies) or social sciences (Sociology, Psychology, Anthropology). Recent graduates of our new "Writing Youth Literature" course have gone to internships at Sesame Street Productions and the Harvey Klinger Literary Agency in New York City. For more information on the study of children's literature at the University, see www.childrenslit.pitt.edu.

Course Requirements

The certificate is a planned interdisciplinary sequence of at least 18 credits. The program director must also be consulted about the design of the student's individual course of study. The three required core courses for the certificate are listed below.

Students are encouraged to take all four of the below courses, since either ENGLIT 0562 or ENGLIT 0655 may be taken as a Category 1 elective. Of these two courses, the course not taken as an elective must be taken as a core course.

In addition to the three core courses, students should design their own course of study to complete the remaining credits, in consultation with the program director. Courses must be selected from an approved list of courses, available from the program director.

- ENGLIT 0560 - CHILDREN AND CULTURE
- ENGLIT 0562 - CHILDHOOD'S BOOKS or
- ENGLIT 0655 - REPRESENTING ADOLESCENCE
- ENGLIT 1645 - CRITL APPRCH TO CHILDREN'S LIT *

Note:

* ENGLIT 1645 - CRITL APPRCH TO CHILDREN'S LIT is the capstone course for the Children's Literature program and must be taken last.

Other requirements

- A minimum GPA of 2.0 is required in each course that counts toward the certificate.
- There is no limit to the number of courses that can be taken on the S/NC basis for this certificate.

Nanoscience and Engineering Undergraduate Certificate

Advances in nanoscience and nanotechnology (the ability to predict, create, and design with nanoscale materials and systems) are expected to reveal new physical phenomena and to enable the creation of highly desirable products and devices, in addition to revolutionary changes in industrial practice. Strength in nanoscience and nanotechnology has been identified as the nation's future competitiveness and prosperity, and strategic plans have been developed to accelerate nanoscience research and development, encourage knowledge transfer to spur economic growth, and expand educational programs and workforce training - all in a socially and environmentally responsible and sustainable manner.

Nanoscience and nanotechnology also has had a large and rapidly growing local impact. The Pittsburgh region is home to a number of corporations, including many smaller start-up companies, with major nanotechnology components to their businesses. The continued success of companies such as PPG, Seagate, Bayer, Alcoa, Plextronics, Westinghouse, Bettis, and II-VI will depend on their ability to recruit local engineering talent with the required background in nanoscience and nanotechnology. The continued development of nanotechnology-based entrepreneurial start-ups will depend in large part on a vibrant pool of young engineers and scientists with appropriate educational experience in nanoscience and nanotechnology.

This joint certificate, housed in both the Swanson School of Engineering (SSOE) and the Dietrich School of Arts and Sciences (Dietrich School) enables BS students from both schools to complement their education by completing a fivecourse sequence. The certificate is designed to be combined with coursework in any SSOE degree-granting program, or with chemistry and physics in the Dietrich School.

The course requirements for this certificate follow.

Required courses

This course has prerequisites.

- ENGR 0240 - NANOTECHNOLOGY AND NANO-ENGINEERING

One of the following courses

These courses have prerequisites.

- PHYS 1375 - FOUNDATIONS OF NANOSCIENCE

One of the following courses

- PHYS 1903 - DIRECTED RESEARCH

Two elective courses from the following list

- CHEM 1600 - SYNTHESIS & CHARCTRZTN POLYMERS
- CHEM 1620 - ATOMS, MOLECULES AND MATERIALS
- ECE 0257 - ANALYSIS AND DESIGN OF ELECTRONIC CIRCUITS
- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- ECE 2295 - SPECIAL TOPICS: ELECTRONICS
- ENGR 0241 - FABRICATION AND DESIGN IN NANOTECHNOLOGY

- IE 1012 - MANUFACTURE OF STRUCTURAL NANOMATERIALS or
- IE 2012 - MANUFACTURE OF STRUCTURAL NANOMATERIALS

- MEMS 1057 - MICRO/NANO MANUFACTURING
- MEMS 1447 - Nanocharacterization
- MEMS 1469 - Materials Science of Nanostructures
- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1374 - SOLID STATE PHYSICS

One of the following courses

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CHEM 1480 - INTERMEDIATE PHYSICAL CHEMISTRY

One of the following courses

- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1
- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2

Additional information and requirements

- No more than six credits of coursework may overlap between the reuirements for this certificate and a major in Physic and Astronomy or in Chemistry.
- A minimum GPA of 2.0 is required in each course that counts toward the certificate.
- No course that counts toward this certificate may be taken on an S/NC basis.
- For more information about this certificate, Dietrich School students should contact the departmental advisor in Physics and Astronomy.

Photonics Certificate

Photonics is one of the fastest growing high-tech industries in the world today. It includes optical communications (e.g., fiber optics, lasers, and infrared links), optical imaging (e.g., spy and weather satellites, night vision, holography, flat screen display, and CCD video cameras), optical data storage (e.g., CDs and CD-ROMs), optical detectors (e.g., supermarket scanners, medical optics, and nondestructive evaluation of materials), lasers (e.g., welding lasers, laser surgery, laser shows, and laser rangefinders), spectroscopy (e.g., chemical analysis and detection), and quantum optics (e.g., quantum cryptography, quantum computing, and single-photon detection).

Although the photonics industry is growing rapidly, photonics companies have a hard time finding qualified people because the interdisciplinary field crosses physics, physical chemistry, and electrical engineering. The photonics certificate program at the University of Pittsburgh will give this kind of cross-cutting experience and allow students to move directly into the photonics industry. The Certificate in Photonics will also serve as good preparation for graduate school in solid state physics, physical chemistry, or electrical engineering with optoelectronics emphasis.

Students in the certificate program will have opportunities for laboratory research with professors at the University of Pittsburgh and will also receive special job placement referrals.

Requirements

The certificate is designed to fit easily with a physics, chemistry, or electrical engineering major, but students with other majors can also earn the certificate.

To receive the certificate, students must have taken

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0250 - MATRIX THEORY & DIFFT EQUATIONS

One of the following pairs

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)
  or
- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

One of the following pairs

- CHEM 0110 - GENERAL CHEMISTRY 1 and
- CHEM 0120 - GENERAL CHEMISTRY 2
  or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1 and
- CHEM 0720 - UHC GENERAL CHEMISTRY 2
  or
- CHEM 0960 - GENERAL CHEM FOR ENGINEERS 1 and
- CHEM 0970 - GENERAL CHEM FOR ENGINEERS 2

Required laboratory courses:

One of the following

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING

- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY and
- CHEM 0260 - INTRODUCTION TO ANALYTICAL CHEMISTRY LAB

- ECE 0501 - DIGITAL SYSTEMS LABORATORY

One of the following

- PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS

- ECE 1201 - ELECTNC MEASURMNTS & CRCTS LAB and
- ECE 1212 - ELECTRONIC CIRCUIT DESIGN LAB

- CHEM 1430 - PHYSICAL CHEMISTRY LABORATORY 1 and
- CHEM 1255 - INSTRUMENTAL ANALYSIS LAB

In addition

The following courses are required for the certificate.

- PHYS 1361 - WAVE MOTION AND OPTICS

- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- ECE 1232 - INTRO LASERS & OPTCL ELECTNC
- Junior Photonics Seminar (two semesters, each 1 credit) (cross listed as PHYS 0177, CHEM 1750 , or ECE 1248)
- Photonics Theory 1 (3 credits) (cross listed as PHYS 1363 , CHEM 1470 /CHEM 1472 , or ECE 1240 /1240)
- Photonics Theory 2 (3 credits) (cross listed as PHYS 1364 , CHEM 1470 /CHEM 1472 , or ECE 1240 /ECE 1241)
- Photonics Laboratory (1 credit) (PHYS 1365 , to be cross listed in EE and CHEM)

One of the following

- CHEM 1410 - PHYSICAL CHEMISTRY 1

- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1 and
- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2

Two of the following courses or sequences

- CHEM 1250 - INSTRUMENTAL ANALYSIS
- TELCOM 2222 - Photonic Communications

One of the following

- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM

- ECE 1259 - ELECTROMAGNETICS and
- ECE 1266 - APPLICTIONS OF FIELDS & WAVES

Note:

For more information, see www.phyast.pitt.edu/~snoke/photonics.

Public and Professional Writing Certificate

Writing plays a crucial role in the lives of people after they leave college, as students go on to work, volunteer, attend professional schools, and advocate for themselves and others. The PPW certificate focuses on writing that serves professional goals and/or the public interest. We invite students from across the University to focus on writing as a way to develop the critical writing, learning, and thinking skills necessary to all sectors of American professional life-private, nonprofit, and government.

Students who know that they will write extensively as professionals in law, medicine, the sciences, social work, public policy, international relations, business, or other fields are good candidates for the PPW certificate, as are students who are interested in advocacy and activism. Students contemplating graduate work should also find the course of study leading to the PPW certificate useful. The courses will allow students to work on significant writing projects in a range of venues. Students who have finished the certificate should have a compelling portfolio of work that they can show to prospective employers.

Students should expect to undertake rigorous intellectual work that will increase their precision as writers, deepen their facility with language and style, and deepen their engagement with writing as a form of social action that has consequences in the world. For more information, see www.composition.pitt.edu/ppw/.

All students who wish to enroll in the certificate program must submit a letter of intent (this would be the equivalent of an admission essay), a resume, and a writing sample. Please submit this information via campus mail or U.S. mail to Department of English, Public and Professional Writing Certificate, 526 Cathedral of Learning, Pittsburgh, PA 15260.

Requirements

At least 18 credits are required to complete the PPW certificate; students must maintain a minimum B GPA in the three courses required by the certificate.

Students must take ONE of the following core courses:

After they have completed one of the core courses with at least a B, students must also complete, with at least a B, a minimum of TWO approved 1000-level courses (one of which may be a PPW internship) in the composition program.

The remaining 9 credits may come from designated intermediate and advanced course offerings in the English department. The list of designated courses that count toward the certificate will be given to students when they register for the program; designated courses are also listed online. Students may petition to have a relevant course count toward the PPW certificate.

- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS
- ENGCMP 0420 - WRITING FOR THE PUBLIC

Undergraduate Certificate in Sustainability

Environmental and sustainability programs study coupled human-natural systems using interdisciplinary approaches and knowledge. Such programs work at the science-engineering, science-policy, and policy management interfaces and aim to prepare sustainability-oriented problem solvers through interdisciplinary research, scholarship, and practice. This certificate addresses the need for education and research to strengthen our understanding of the links between human behavior and natural processes by integrating the behavioral and social sciences, earth sciences, physical sciences, engineering, and information sciences.

Completion of the certificate in the Dietrich School requires 18 credits. The following requirements are for Dietrich School students who pursue this certificate. Be advised that Swanson School of Engineering students may have different requirements.

Required Courses

- ENGR 1905 - CURRENT ISSUES IN SUSTAINABILITY
- ENGR 1907 - SUSTAINABILITY CAPSTONE
- GEOL 1030 - THE ATMOSPHERE, OCEANS AND CLIMATE

Elective Courses

Select three of the following courses. Only one course may be in the student's major department.

- BIOSC 0740 - YELLOWSTONE FIELD COURSE (UHC, off-campus in Wyoming)
- BIOSC 1160 - FOREST ECOLOGY (off-campus at Pymatuning Laboratory of Ecology)
- BIOSC 1220 - ECOLOGICAL FIELD STUDIES (off-campus at Pymatuning Laboratory of Ecology)
- BIOSC 1310 - WETLAND ECOLOGY AND MANAGEMENT (off-campus at Pymatuning Laboratory of Ecology)
- BIOSC 1610 - CONSERVATION BIOLOGY (off-campus at Pymatuning Laboratory of Ecology)
- CEE 1217 - GREEN BUILDING DESIGN AND CONSTRUCTION
- CEE 1218 - DESIGN FOR THE ENVIRONMENT
- CEE 1503 - INTRO TO ENVIRONMENTAL ENGRNG
- CS 0090 - SUSTAINABILITY AND COMPUTING
- ECE 1769 - POWER SYSTEM ANALYSIS 1
- ECON 0360 - INTRODUCTION TO ENVIRONMENT AND RESOURCE ECONOMICS
- ECON 0530 - INTRODUCTION TO DEVELOPMENT ECONOMICS
- ECON 1360 - ENVIRONMENTAL ECONOMICS
- ENGLIT 0710 - CONTEMPORARY ENVIRONMENTAL LITERATURE
- ENGLIT 1005 - LITERATURE AND THE ENVIRONMENT
- ENGR 1060 - SOCIAL ENTREPRENEURSHIP- ENGINEERING FOR HUMANITY
- GEOL 0860 - ENVIRONMENTAL GEOLOGY
- GEOL 1051 - GROUNDWATER GEOLOGY
- GEOL 1060 - GEOMORPHOLOGY
- GEOL 1333 - SUSTAINABILITY
- GEOL 1445 - GIS, GPS, AND COMPUTER METHODS
- GEOL 1515 - ENVIRONMENTAL GEOCHEMISTRY
- GEOL 1904 - DIRECTED READING
- GSWS 1450 - GENDER AND SUSTAINABILITY
- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT

- HIST 1019 - CITIES IN HISTORICAL PERSPECTIVE
- HIST 1695 - ENVIRONMENTAL HISTORY
- HONORS 1544 - READING THE EARTH: WYOMING FIELD STUDIES IN ECOLOGY AND PALEONTOLOGY (UHC, off campus in Wyoming)
- MEMS 1065 - THERMAL SYSTEMS DESIGN
- PIA 2231 - CONTEMPORARY US ENERGY POLICY
- PS 1542 - GLOBAL ENVIRONMENTAL POLITICS
- SA 1340 - SCULPTURE STUDIO: PROJECTS
- SOC 1445 - SOCIETY AND ENVIRONMENT
- URBNST 0080 - INTRODUCTION TO URBAN STUDIES
- URBNST 1614 - URBAN SUSTAINABILITY

Additional information and requirements

- A minimum GPA of 2.0 is required in each course that counts toward the certificate.
- No course that counts toward this certificate may be taken on the S/NC basis.

Department of Africana Studies

Africana studies is the study, research, interpretation, and dissemination of knowledge concerning African American, African, and Caribbean affairs and culture. Using the tools of the social sciences and humanities, Africana studies examines the structure, organization, problems, and perspectives of Blacks in Africa and the African Diaspora. Africana studies also stresses analytical interpretations and policy prescriptions for social change in African American communities and in various African and Caribbean nations. The term Africana incorporates the three-tier interdisciplinary thrust of the department: African, African American, and Caribbean social sciences and humanities.

Africana studies prepares social science majors for advanced graduate studies in international affairs, education, social work, social policy studies, and legal and professional training. In the humanities, preparation in the creative arts and literature gears students to practical development in such fields as communication, teaching, theater, and dance. Africana studies occupies a central role in understanding modern American life and African and Caribbean linkages. As an interdisciplinary major, Africana studies offers intellectual paradigms for the multicultural approach to historical, political, and economic reality. It is also critical and corrective of the inadequacies, omissions, and distortions of mainstream American education leading into the 21st century. Africana studies is committed to producing liberally educated women and men with a lifetime dedication to working on African American, African, and Caribbean affairs. For more information on the major and the Department of Africana Studies, see the department's Web site at www.africanastudies.pitt.edu.

Major

Africana Studies, BA

Africana Studies is the study, research, interpretation, and dissemination of knowledge concerning African American, African, and Caribbean affairs and culture. Using the tools of the social sciences and humanities, Africana Studies examines the structure, organization, problems, and perspectives of Blacks in Africa and the African Diaspora. Africana Studies also stresses analytical interpretations and policy prescriptions for social change in African American communities and in various African and Caribbean nations. The term Africana incorporates the three-tier interdisciplinary thrust of the department: African, African American, and Caribbean social sciences and humanities.

Africana Studies prepares social science majors for advanced graduate studies in international affairs, education, social work, social policy studies, and legal and professional training. In the humanities, preparation in the creative arts and literature gears students to practical development in such fields as communication, teaching, theater, and dance. Africana Studies occupies a central role in understanding modern American life and African and Caribbean linkages. As an interdisciplinary major, Africana Studies offers intellectual paradigms for the multicultural approach to historical, political, and economic reality. It is also critical and corrective of the inadequacies, omissions, and distortions of mainstream American education leading into the 21st century. Africana Studies is committed to producing liberally educated women and men with a lifetime dedication to working on African American, African, and Caribbean affairs. For more information on the major and the Department of Africana Studies, see the department's Web site at www.africanastudies.pitt.edu.

Major Requirements

Students are urged to meet with the departmental advisor no later than the beginning of the junior year to confirm a plan of study. The Africana studies major requires:

A total of 30 credits with a focused area of study in either humanities or social science. A 2.0 grade point average in all Africana Studies courses is required for graduation. The department does not permit courses for the major to be taken on an S/NC basis.

All majors, regardless of concentration, are required to take the following three core courses.

- AFRCNA 0031 - INTRODUCTION TO AFRICANA STUDIES
- AFRCNA 1768 - AFRICANA SENIOR RESEARCH SEMINAR
- AFRCNA 1900 - INTERNSHIP

Humanities Concentration

Seven courses as follows; see the lists below for specific courses.

- Two lower level AFRCNA humanities courses
- Three upper level AFRCNA humanities courses
- One lower level AFRCNA social science course
- One upper level AFRCNA social science course

Social Sciences Concentration

Seven courses as follows; see the lists below for specific courses.

- Two lower level AFRCNA social science courses
- Three upper level AFRCNA social science courses
- One lower level AFRCNA humanities course
- One upper level AFRCNA humanities course

Lower-level courses

Humanities courses

- AFRCNA 0150 - AFRICAN AMERICAN LITERATURE
- AFRCNA 0212 - WEST AFRICAN DANCE
- AFRCNA 0242 - AFRICANA URBAN WOMAN
- AFRCNA 0316 - INTRODUCTION AFRICAN AMERICAN THEATER
- AFRCNA 0352 - AFRICAN AMERICAN DANCE
- AFRCNA 0454 - MAN/WOMAN LITERATURE
- AFRCNA 0517 - INTRODUCTION TO AFRICAN AMERICAN POETRY
- AFRCNA 0522 - INTRODUCTION TO AFRICAN LITERATURE
- AFRCNA 0523 - SWAHILI 1
- AFRCNA 0524 - SWAHILI 2
- AFRCNA 0639 - HISTORY OF JAZZ

Social Science courses

- AFRCNA 0120 - AFRICAN AMERICAN EXPERIENCE SPORTS
- AFRCNA 0127 - INTRODUCTION TO AFRICA
- AFRCNA 0311 - INTRODUCTION TO THE AFRICAN AMERICAN FAMILY
- AFRCNA 0313 - THE BLACK CHURCH
- AFRCNA 0318 - HISTORY OF AFRICA BEFORE 1800
- AFRCNA 0385 - CARIBBEAN HISTORY
- AFRCNA 0434 - PSYCHOLOGICAL EXPERIENCE AFRICAN AMERICAN FEMALE
- AFRCNA 0454 - MAN/WOMAN LITERATURE
- AFRCNA 0536 - 20TH CENTURY AFRICAN AMERICAN WOMAN HISTORY
- AFRCNA 0586 - EARLY AFRICAN CIVILIZATIONS

- AFRCNA 0628 - AFRO-LATIN AMERICA
- AFRCNA 0629 - AFRO-AMERICAN HISTORY 1
- AFRCNA 0630 - AFRO-AMERICAN HISTORY 2
- AFRCNA 0787 - BLACK CONSCIOUSNESS

Upper-level courses

Humanities courses

- AFRCNA 1033 - AFRICAN AMERICANS AND MASS MEDIA
- AFRCNA 1145 - AFRICAN AMERICAN RHETORIC
- AFRCNA 1150 - CONTEMPORARY AFRICAN AMERICAN WRITING
- AFRCNA 1240 - AFRICAN LITERATURE AND SOCIETY
- AFRCNA 1306 - WORLD LITERATURE IN ENGLISH
- AFRCNA 1334 - MUSIC IN AFRICA
- AFRCNA 1335 - AFRICAN-AMERICAN MUSIC IN THE UNITED STATES
- AFRCNA 1347 - FRANCOPHONE AFRICANA LITERATURE
- AFRCNA 1349 - CONTEMPORARY CARIBBEAN LITERATURE
- AFRCNA 1353 - COMPARATIVE DANCE EXPRESSION
- AFRCNA 1555 - AFRO CARIBBEAN DANCE
- AFRCNA 1616 - AFRICAN AMERICAN WOMEN WRITERS
- AFRCNA 1704 - AFRICANA WORLD LITERATURE

Social Science courses

- AFRCNA 1012 - EARLY 20TH CENTURY BLACK SOCIAL MOVEMENT
- AFRCNA 1021 - HISTORY OF THE AFRICAN DIASPORA
- AFRCNA 1030 - INTRODUCTION TO AFRICAN POLITICS
- AFRCNA 1039 - HISTORY OF CARIBBEAN SLAVERY
- AFRCNA 1108 - AFRICAN AMERICAN FOLK CULTURE
- AFRCNA 1309 - WOMEN OF AFRICAN AND AFRICAN DIASPORA
- AFRCNA 1310 - CULTURES OF AFRICA
- AFRCNA 1331 - AFRICAN LIBERATION MOVEMENTS
- AFRCNA 1402 - LEARNING PARADIGMS AFRICAN AMERICAN CHILD DEVELOPMENT
- AFRCNA 1522 - SEX AND RACISM
- AFRCNA 1538 - HISTORY OF BLACK PITTSBURGH
- AFRCNA 1656 - HISTORY OF AFRICA SINCE 1800
- AFRCNA 1661 - POLITICAL ECONOMY OF AFRICA
- AFRCNA 1710 - AFRICAN AMERICAN HEALTH ISSUES

Additional requirements

Students must complete one of their required writing-intensive (W) course in the major.

Minor

Africana Studies Minor - African American Culture Option

Minor Requirements

Option 1:

- AFRCNA 0031 - INTRODUCTION TO AFRICANA STUDIES

- two lower-level courses from the subset
- and two upper-level courses from the subset

(15 Credits Total)

Lower level courses

- AFRCNA 0150 - AFRICAN AMERICAN LITERATURE
- AFRCNA 0311 - INTRODUCTION TO THE AFRICAN AMERICAN FAMILY
- AFRCNA 0313 - THE BLACK CHURCH
- AFRCNA 0352 - AFRICAN AMERICAN DANCE
- AFRCNA 0454 - MAN/WOMAN LITERATURE
- AFRCNA 0517 - INTRODUCTION TO AFRICAN AMERICAN POETRY
- AFRCNA 0629 - AFRO-AMERICAN HISTORY 1
- AFRCNA 0639 - HISTORY OF JAZZ
- AFRCNA 0787 - BLACK CONSCIOUSNESS

Upper level courses

- AFRCNA 1012 - EARLY 20TH CENTURY BLACK SOCIAL MOVEMENT
- AFRCNA 1033 - AFRICAN AMERICANS AND MASS MEDIA
- AFRCNA 1108 - AFRICAN AMERICAN FOLK CULTURE
- AFRCNA 1145 - AFRICAN AMERICAN RHETORIC
- AFRCNA 1335 - AFRICAN-AMERICAN MUSIC IN THE UNITED STATES
- AFRCNA 1402 - LEARNING PARADIGMS AFRICAN AMERICAN CHILD DEVELOPMENT
- AFRCNA 1522 - SEX AND RACISM
- AFRCNA 1616 - AFRICAN AMERICAN WOMEN WRITERS
- AFRCNA 1704 - AFRICANA WORLD LITERATURE
- AFRCNA 1710 - AFRICAN AMERICAN HEALTH ISSUES

Africana Studies Minor - African Culture Option

Minor Requirements

Option 2:

- AFRCNA 0031 - INTRODUCTION TO AFRICANA STUDIES
- two lower-level courses from the subset
- and two upper-level courses from the subset

(15 Credits Total)

Lower level courses

- AFRCNA 0127 - INTRODUCTION TO AFRICA
- AFRCNA 0212 - WEST AFRICAN DANCE
- AFRCNA 0242 - AFRICANA URBAN WOMAN
- AFRCNA 0318 - HISTORY OF AFRICA BEFORE 1800
- AFRCNA 0522 - INTRODUCTION TO AFRICAN LITERATURE
- AFRCNA 0586 - EARLY AFRICAN CIVILIZATIONS
- AFRCNA 0787 - BLACK CONSCIOUSNESS

Upper level courses

- AFRCNA 1030 - INTRODUCTION TO AFRICAN POLITICS
- AFRCNA 1240 - AFRICAN LITERATURE AND SOCIETY
- AFRCNA 1309 - WOMEN OF AFRICAN AND AFRICAN DIASPORA
- AFRCNA 1310 - CULTURES OF AFRICA
- AFRCNA 1331 - AFRICAN LIBERATION MOVEMENTS
- AFRCNA 1334 - MUSIC IN AFRICA
- AFRCNA 1347 - FRANCOPHONE AFRICANA LITERATURE
- AFRCNA 1655 - AFRICAN CINEMAS/SCREEN GRIOTS
- AFRCNA 1656 - HISTORY OF AFRICA SINCE 1800
- AFRCNA 1661 - POLITICAL ECONOMY OF AFRICA

Africana Studies Minor - Multidisciplinary Option

Minor Requirements

Option 3:

- AFRCNA 0031 - INTRODUCTION TO AFRICANA STUDIES
- one lower-level course from the humanities subset
- one lower-level course from the social sciences subset
- one upper-level course from the humanities subset
- and one upper-level course from the social sciences subset

(15 Credits Total)

Lower level courses

Humanities

- AFRCNA 0212 - WEST AFRICAN DANCE
- AFRCNA 0316 - INTRODUCTION AFRICAN AMERICAN THEATER
- AFRCNA 0352 - AFRICAN AMERICAN DANCE

Social Science

- AFRCNA 0120 - AFRICAN AMERICAN EXPERIENCE SPORTS
- AFRCNA 0313 - THE BLACK CHURCH
- AFRCNA 0385 - CARIBBEAN HISTORY
- AFRCNA 0630 - AFRO-AMERICAN HISTORY 2

Upper level courses

Humanities

- AFRCNA 1033 - AFRICAN AMERICANS AND MASS MEDIA
- AFRCNA 1145 - AFRICAN AMERICAN RHETORIC
- AFRCNA 1240 - AFRICAN LITERATURE AND SOCIETY
- AFRCNA 1306 - WORLD LITERATURE IN ENGLISH
- AFRCNA 1347 - FRANCOPHONE AFRICANA LITERATURE
- AFRCNA 1349 - CONTEMPORARY CARIBBEAN LITERATURE

- AFRCNA 1353 - COMPARATIVE DANCE EXPRESSION
- AFRCNA 1555 - AFRO CARIBBEAN DANCE
- AFRCNA 1655 - AFRICAN CINEMAS/SCREEN GRIOTS

Social Science

- AFRCNA 1021 - HISTORY OF THE AFRICAN DIASPORA
- AFRCNA 1039 - HISTORY OF CARIBBEAN SLAVERY
- AFRCNA 1538 - HISTORY OF BLACK PITTSBURGH
- AFRCNA 1656 - HISTORY OF AFRICA SINCE 1800

Joint Major

Africana Studies - English, BA

The joint major offers an especially coherent experience in interdisciplinary learning by bringing together Africana Studies and English in two interrelated ways. Students get a rich and rigorous exposure to African and African Diaspora literature written in English through literature produced in the United States, Africa, Canada, Great Britain, and the Caribbean. Additionally, students examine some of the significant relationships between African and African Diaspora works and a range of English-language literary traditions.

The major is designed to expose students to important questions and traditions in literary interpretation and to offer them political, social, and cultural contexts for the literature they will be reading. Like most liberal arts majors, it helps students learn to think analytically and to make and assess arguments, skills that are important in many jobs and courses of graduate study. The major is also useful for prospective teachers who would be interested in developing and teaching curricula that include African Diaspora literature within other English-language traditions. Students who complete the joint major will have fulfilled most of the School of Education's undergraduate requirements for secondary education certification in English.

The Africana Studies-English joint major requires 45 credits distributed as follows: four core courses, four literature courses from the Department of Africana Studies, three literature courses from the Department of English, and four electives, one of which must be a history course in the Department of Africana Studies. No more than two upper-division courses can count toward the major before a student has completed the introductory courses, and three of the required courses in each department excluding the core courses must be taken before a student enrolls in the senior seminar.

Joint Major Requirements

Core courses

All of the following courses.

- AFRCNA 0031 - INTRODUCTION TO AFRICANA STUDIES
- ENGLIT 0500 - INTRODUCTION TO CRITICAL READING
- ENGLIT 1900 - PROJECT SEMINAR
- ENGLIT 1910 - SENIOR SEMINAR

Africana Studies courses

Choose four of the following courses.

- AFRCNA 0150 - AFRICAN AMERICAN LITERATURE
- AFRCNA 0316 - INTRODUCTION AFRICAN AMERICAN THEATER
- AFRCNA 0522 - INTRODUCTION TO AFRICAN LITERATURE
- AFRCNA 1306 - WORLD LITERATURE IN ENGLISH
- AFRCNA 1349 - CONTEMPORARY CARIBBEAN LITERATURE
- AFRCNA 1704 - AFRICANA WORLD LITERATURE

English Literature courses

Choose three of the following courses.

- ENGLIT 1125 - MASTERPIECES OF RENAISSANCE LITERATURE
- ENGLIT 1150 - ENLIGHTENMENT TO REVOLUTION
- ENGLIT 1175 - 19TH CENTURY BRITISH LITERATURE
- ENGLIT 1200 - AMERICAN LITERATURE TO 1860
- ENGLIT 1220 - CIVIL WAR TO WORLD WAR 1 IN AMERICAN LITERATURE
- ENGLIT 1325 - MODERNISM
- ENGLIT 1380 - WORLD LITERATURE IN ENGLISH

Elective courses

Students must choose four elective courses from offerings in the departments of Africana Studies and English. One of these electives must be a history course offered by the Department of Africana Studies. Students might also use electives to pursue more extensive work in particular areas of study, such as African, African-American, British, Caribbean, or U.S. literature.

In light of the interdisciplinary and international character of the joint major, it would be appropriate for students to petition to have a closely related course taught in a foreign language (for example, a course on Francophone-Caribbean literature in the Department of French and Italian Languages and Literatures) count as one of the electives toward the joint major.

Students interested in careers in education should pay particular attention to courses required by various School of Education certification programs.

Department of Anthropology

Anthropology is concerned with how humans and human societies evolve, with the differences and similarities among human cultures, and with the cultural and biological basis for human behavior. Anthropology integrates a wide range of perspectives on human behavior, culture, and society. Students become familiar with the basic concerns of four subgroups of anthropology:

- Archaeology offers courses covering many geographic regions (Latin America, North America, and China), techniques of analysis, and issues in prehistory. Museum collections, internships in cultural resource management, and a summer field school provide opportunities for student involvement in archaeological work.
- Physical anthropology offers classes on evolutionary theory; human genetics; osteoarchaeology; and human and nonhuman primate evolution, anatomy, morphology, and behavior.
- Cultural anthropology offers a wide variety of courses on cultural areas including the Pacific, Latin America, China, Japan, South Asia, Eastern Europe, and the United States. Classes provide cross-cultural studies of topics such as medical anthropology, food, social and political organization, gender roles, kinship, ethnicity and nationalism, folklore, religion, and conflict and violence.
- Anthropological linguistics offers courses on the nature of languages around the world, focusing on the relationship of language to other aspects of culture and society. Among the courses offered are Gypsy Language and Culture and Writing Systems of Ancient Mesoamerica.

For more information on the major and the Department of Anthropology, visit www.anthropology.pitt.edu.

Major

Anthropology, BA

Anthropology is concerned with how humans and human societies evolve, with the differences and similarities among human cultures, and with the cultural and biological basis for human behavior. It integrates a wide range of perspectives on human behavior, culture, and society. Students will become familiar with the basic concerns of four sub-fields of anthropology: archaeology, physical anthropology, cultural anthropology, and anthropological linguistics.

The archaeology program offers courses covering many geographic regions (Latin America, North America, China, and Europe, among others), techniques of analysis, and issues in prehistory. Opportunities for student involvement in archaeological work are provided through museum collections, participation in research with faculty and graduate students, and a periodic summer field school.

The physical anthropology program offers classes on evolutionary theory, human genetics, osteoarchaeology, forensic anthropology, and human and nonhuman primate evolution, anatomy and morphology.

Cultural anthropology is represented by a wide variety of courses on culture areas including the Pacific, Latin America, China, Japan and South Asia, Eastern Europe and the United States. Classes provide cross-cultural studies of topics such as medical anthropology, food, social and political organization, sex roles, kinship, ethnicity, folklore, and religion.

Linguistic Anthropology examines language, and other semiotic systems, as forms of practice through which social relations, cultural forms, and beliefs are constituted. Courses are offered on language and the emotions; ritual performance; language shifts and code-switching; connections between language, ethnicity, cognition, nationalism, and political systems; orality and literacy; and analysis of changing media forms. Courses examine dominant, minority, and endangered languages with particular regional reference to Asia, The Pacific, and Europe.

Students pursuing the Anthropology major must complete 33 credits or coursework as described below.

Core courses

Students must complete two of the three primary introductory courses in Anthropology (ANTH 0582, ANTH 0680, and ANTH 0780) with a grade of C or better prior to declaring this major.

- ANTH 0582 - INTRODUCTION TO ARCHEOLOGY
- ANTH 0680 - INTRODUCTION TO PHYSICAL ANTHROPOLOGY
- ANTH 0780 - INTRODUCTION TO CULTURAL ANTHROPOLOGY

History of Anthropology course

- ANTH 1552 - A HISTORY OF ANTHROPOLOGICAL THOUGHT

Methods course

The Department of Anthropology offers a course in each sub-discipline. Students must complete one course as appropriate for their field of study.

- ANTH 1534 - ARCHEOLOGICAL DATA ANALYSIS 1
- ANTH 1537 - BASIC LABORATORY ANALYSIS
- ANTH 1556 - ZOOARCHAEOLOGY
- ANTH 1601 - STRUCTURE AND FUNCTION
- ANTH 1602 - HUMAN SKELETAL ANALYSIS
- ANTH 1605 - PRIMATE ANATOMY
- ANTH 1609 - ADVANCED SKELETAL ANALYSIS
- ANTH 1617 - PALEOPATHOLOGY
- ANTH 1763 - FIELD METHODS

Undergraduate Seminar

Students must complete one undergraduate seminar. ANTH 1750 - UNDERGRADUATE SEMINAR is one option; students should consult with the major advisor for other courses that meet this requirement.

Electives

Students must complete a minimum of elective five courses in Anthropology. At least three of the elective courses must be at the 1000-level.

Other requirements

Grade requirements: A minimum GPA of 2.0 in departmental courses is required for graduation.

Satisfactory/No Credit option: No course that counts toward the major can be taken on an S/NC basis.

Writing (W) requirement: Students must complete at least one W course in the major.

Honors major requirements: Students with a minimum overall GPA of 3.25 and a minimum GPA of 3.5 in their Anthropology courses will be graduated from the department with honors, pending the submission and acceptance of a paper representing substantial student research. The honors paper may be the expanded version of a paper from a current or previous course, or may result from independent research.

Additional information:

The department strongly recommends a field school course for undergraduate majors.

The Undergraduate Anthropology Club offers workshops, hosts informal discussions, shows films, and organizes field trips for Anthropology majors and those interested in Anthropology. Additional information is available via the Anthropology Club mailbox in WWPH 3302.

Architectural Studies Program

Learning to think about architecture as both the product of a creative process and as an historical phenomenon are the principal goals of the University of Pittsburgh's bachelor programs in Architectural Studies (BA) and Architecture (BS). The programs endeavor to create a rigorous curriculum and a supportive learning environment, allowing students to build skills and knowledge while developing close working relationships with peers and faculty. Students will gain a broad understanding of the complexity of architecture as a profession and as an academic discipline and will be well-positioned by their senior year to apply to accredited, graduate programs in architecture or historic preservation at universities in the United States and Canada. Students considering careers in architecture and historic preservation are encouraged to declare either major by the end of their freshman year at Pitt.

The programs' curriculum draws primarily on courses offered in the Department of History of Art and Architecture and the Department of Studio Arts. Students are encouraged to explore related interests through course work in other departments, through off-campus study, and through a range of undergraduate teaching and research opportunities available through Pitt's University Honors College and the Dietrich School of Arts and Sciences.

As pre-professional courses of study, the programs offer students the opportunity to explore their professional interests while acquiring a liberal arts education. Such preparation instills an intellectual maturity and a breadth of cultural experience that serve students to their advantage during professional career training. Students should be aware that a degree in architectural studies or in architecture does not constitute professional or technical training.

For more information about the Architectural Studies Program, visit www.arch.pitt.edu.

Major

Architectural Studies - Design Track Studio Arts Concentration, BA

Requirements

The Design track requires completion of 48 credits with an additional 9 credits in a Studio Arts concentration.

Architectural Studies courses

- ARC 0901 - ARCHITECTURAL STUDIES PROSEMINAR 1
- ARC 0902 - ARCHITECTURAL STUDIES PROSEMINAR
- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT
- ARC 1160 - ARCHITECTURE: IMAGE, TEXT, THEORY
- ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1
- ARC 0201 - FOUNDATIONS STUDIO 1 *
- ARC 1912 - ARCHITECTURE AND DIGITAL MEDIA 2
- ARC 1201 - ARCHITECTURE DESIGN STUDIO 1
- ARC 1202 - ARCHITECTURE DESIGN STUDIO 2

Note

A grade of C or better is required in ARC 0201 to enroll in ARC 1201.

Physics course

- PHYS 0110 - INTRODUCTION TO PHYSICS 1

History of Art and Architecture courses

- HAA 0040 - INTRODUCTION TO WESTERN ARCHITECTURE
- ARC 0116 - MODERN ARCHITECTURE
- Two additional HAA courses in architectural history

Required Studio Arts Concentration

- SA 0130 - DRAWING STUDIO 1
- SA 0140 - SCULPTURE STUDIO 1
- SA 1430 - DRAWING STUDIO: PERSPECTIVE

Architectural Studies Major other requirements and recommendations

- A GPA of at least 2.00 in all department courses is required for graduation with a major in Architectural Studies. A minimum GPA of 2.75 is required for an internship, and a minimum of 3.0 is required for those seeking a recommendation for graduate school. Students who plan to apply to graduate school should maintain a minimum GPA of 3.25.
- Only the experiential learning courses ARC 1990, HAA 1901, ARC 1901, HAA 1905, and HAA 1909 may be taken on an S/NC basis. None of these courses can be applied toward the architectural history requirement.
- Students must complete at least one writing-intensive course (W-course) in the major. Each track has a W-course in its requirements - ARC 1160 for the Design track, and ARC 1310 for the Preservation track.
- Students who plan to major in Architectural Studies should contact the departmental advisor as early in their college career as possible to discuss the recommended course sequence for each track, course availability, and entry into restricted classes.
- Proficiency in calculus is required for students seeking a career in architecture. It is highly recommended that students successfully complete at least one semester of college-level calculus (MATH 0220) before they graduate.

Architectural Studies - Preservation Track History of Urban America Concentration, BA

Requirements

The Preservation track requires completion of 39 credits with an additional 12 credits in a proscribed related area in either the History of Urban America or Public Service.

History of Art and Architecture courses

- HAA 0040 - INTRODUCTION TO WESTERN ARCHITECTURE
- Two additional HAA courses in architectural history

One of the following courses

- ARC 1136 - EARLY AMERICAN ARCHITECTURE
- ARC 1137 - AMERICAN ARCHITECTURE SINCE INDUSTRIALIZATION

Architectural Studies courses

- ARC 0901 - ARCHITECTURAL STUDIES PROSEMINAR 1
- ARC 0902 - ARCHITECTURAL STUDIES PROSEMINAR
- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT
- ARC 1990 - ARCHITECTURAL STUDIES INTERNSHIP
- ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1
- ARC 0201 - FOUNDATIONS STUDIO 1

Preservation courses

- ARC 0300 - INTRODUCTION TO HISTORIC PRESERVATION
- ARC 1320 - DOCUMENTATION AND CONSERVATION STUDIO
- ARC 1310 - PRESERVATION - TEXTS AND THEORY

Required Concentration

Every Preservation track major must select either the History of Urban America or Public Service. See www.arch.pitt.edu/prorgram/preservation_track.php for a detailed discussion of the coursework for each.

Architectural Studies Major other requirements and recommendations

- A GPA of at least 2.00 in all department courses is required for graduation with a major in Architectural Studies. A minimum GPA of 2.75 is required for an internship, and a minimum of 3.0 is required for those seeking a recommendation for graduate school. Students who plan to apply to graduate school should maintain a minimum GPA of 3.25.
- Only the experiential learning courses ARC 1990, HAA 1901, ARC 1901, HAA 1905, and HAA 1909 may be taken on an S/NC basis. None of these courses can be applied toward the architectural history requirement.
- Students must complete at least one writing-intensive course (W-course) in the major. Each track has a W-course in its requirements - ARC 1160 for the Design track, and ARC 1310 for the Preservation track.
- Students who plan to major in Architectural Studies should contact the departmental advisor as early in their college career as possible to discuss the recommended course sequence for each track, course availability, and entry into restricted classes.
- Proficiency in calculus is required for students seeking a career in architecture. It is highly recommended that students successfully complete at least one semester of college-level calculus (MATH 0220) before they graduate.

Architectural Studies - Preservation Track Public Service Concentration, BA

Requirements

The Preservation track requires completion of 39 credits with an additional 12 credits in a proscribed related area in either the History of Urban America or Public Service.

History of Art and Architecture courses

- HAA 0040 - INTRODUCTION TO WESTERN ARCHITECTURE
- Two additional HAA courses in architectural history

One of the following courses

- ARC 1136 - EARLY AMERICAN ARCHITECTURE
- ARC 1137 - AMERICAN ARCHITECTURE SINCE INDUSTRIALIZATION

Architectural Studies courses

- ARC 0901 - ARCHITECTURAL STUDIES PROSEMINAR 1
- ARC 0902 - ARCHITECTURAL STUDIES PROSEMINAR
- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT
- ARC 1990 - ARCHITECTURAL STUDIES INTERNSHIP
- ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1
- ARC 0201 - FOUNDATIONS STUDIO 1

Preservation courses

- ARC 0300 - INTRODUCTION TO HISTORIC PRESERVATION
- ARC 1320 - DOCUMENTATION AND CONSERVATION STUDIO
- ARC 1310 - PRESERVATION - TEXTS AND THEORY

Required Concentration

Every Preservation track major must select either the History of Urban America or Public Service. See www.arch.pitt.edu/prorgram/preservation_track.php for a detailed discussion of the coursework for each.

Architectural Studies Major other requirements and recommendations

- A GPA of at least 2.00 in all department courses is required for graduation with a major in Architectural Studies. A minimum GPA of 2.75 is required for an internship, and a minimum of 3.0 is required for those seeking a recommendation for graduate school. Students who plan to apply to graduate school should maintain a minimum GPA of 3.25.
- Only the experiential learning courses ARC 1990, HAA 1901, ARC 1901, HAA 1905, and HAA 1909 may be taken on an S/NC basis. None of these courses can be applied toward the architectural history requirement.
- Students must complete at least one writing-intensive course (W-course) in the major. Each track has a W-course in its requirements - ARC 1160 for the Design track, and ARC 1310 for the Preservation track.
- Students who plan to major in Architectural Studies should contact the departmental advisor as early in their college career as possible to discuss the recommended course sequence for each track, course availability, and entry into restricted classes.
- Proficiency in calculus is required for students seeking a career in architecture. It is highly recommended that students successfully complete at least one semester of college-level calculus (MATH 0220) before they graduate.

Architecture, BS

The Architectural Studies Program's website is an invaluable resource for detailed information about current activities and projects, the curriculum in each track, and resources for students seeking to pursue careers in architectural professions. Please visit www.arch.pitt.edu.

Required courses for the major

The Architecture major requires the completion of 74 credits, distributed as follows.

Architectural Studies courses

- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT
- ARC 1160 - ARCHITECTURE: IMAGE, TEXT, THEORY
- ARC 1990 - ARCHITECTURAL STUDIES INTERNSHIP
- ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1
- ARC 0201 - FOUNDATIONS STUDIO 1
- ARC 1912 - ARCHITECTURE AND DIGITAL MEDIA 2
- ARC 1201 - ARCHITECTURE DESIGN STUDIO 1
- ARC 1202 - ARCHITECTURE DESIGN STUDIO 2
- ARC 1203 - DESIGN STUDIO 3
- ARC 1204 - DESIGN STUDIO 4

History of Art and Architecture courses

- HAA 0040 - INTRODUCTION TO WESTERN ARCHITECTURE
- ARC 0116 - MODERN ARCHITECTURE
    - Two Additional HAA Courses from the approved list of electives.

Approved elective courses

- ARC 0153 - MEDIEVAL ARCHITECTURE
- HAA 0460 - ART IN PUBLIC: INCLUSION , IDENTITY, AND ACTIVISM
- HAA 0510 - PITTSBURGH ARCHITEC/URBANISM
- HAA 0900 - SPECIAL TOPICS-ARCHITECTURAL STUDIES
- ARC 1152 - ROMAN ARCHITECTURE

- HAA 1305 - EARLY RENAISSANCE ARCHITECTURE
- ARC 1156 - HIGH RENAISSANCE ARCHITECTURE
- ARC 1158 - ARCHITECTURE AND ENLIGHTENMENT
- ARC 1161 - MODERNITY, MODERNISM AND HOUSING
- ARC 1118 - ARCHITECTURE SINCE 1945
- ARC 1181 - PITTSBURGH ARCHITECTURE/URBANISM
- ARC 1136 - EARLY AMERICAN ARCHITECTURE
- ARC 1137 - AMERICAN ARCHITECTURE SINCE INDUSTRIALIZATION
- HAA 1630 - CHINA: VILLAGE & URBAN ARCHITECUTRAL SPACE
- HAA 1656 - JAPAN: ARCHITECTURE AS PERFORMATIVE SPACE
- HAA 1680 - JAPAN: ARTIST AND CITY
- ARC 1191 - ARCHITECTURE AND THE CITY IN CENTRAL EUROPE: 19TH AND 20TH CENTURIES
- ARC 0210 - SPECIAL TOPICS-ARCHITECTURE
- ARC 0300 - INTRODUCTION TO HISTORIC PRESERVATION
- ARC 1330 - GLOBAL PRESERVATION

Proseminar courses

- ARC 0901 - ARCHITECTURAL STUDIES PROSEMINAR 1
- ARC 0902 - ARCHITECTURAL STUDIES PROSEMINAR

Studio Arts courses

- SA 0130 - DRAWING STUDIO 1
- SA 0140 - SCULPTURE STUDIO 1

Physics courses

Choose one of the following courses.

- PHYS 0110 - INTRODUCTION TO PHYSICS 1
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
    - CMU 48-116 Building Physics

Carnegie Mellon University courses in Building Science

Choose two of the following courses offered by Carnegie Mellon University.

- CMU 48-215 Materials & Assembly
- CMU 48-351 Human Factors
- CMU 48-324 Statics & Structures
- CMU 48-315 Environment 1

Note

Proficiency in calculus is required for students seeking a career in architecture. It is highly recommended that students successfully complete at least one semester of college-level calculus (MATH 0220) before they graduate.

Required Related Area

Every preservation track major must select either the History of Urban American or the Public Service Related area.

Grade requirements

A minimum GPA of 2.0 is required in those courses that count toward the major. A minimum GPA of 2.75 is required for the internship and a 3.00 for a recommendation to graduate school (although students wishing to apply to graduate school should maintain a minimum GPA of 3.25.)

Satisfactory/No Credit option

Only the experiential learning courses ARC 1990, HAA 1901, ARC 1901, HAA 1905 and HAA 1909 may be taken on an S/NC basis. None of these courses can be applied toward the architectural history course requirement.

Writing requirement

Students must complete at least one W-course in the major. Each track has a w-course in its requirements - ARC 1160 for the Design track and ARC 1310 for the Preservation track.

Advising

It is imperative that students who intend to pursue the architectural studies major contact the departmental advisor as soon as possible to discuss the recommended course sequence for each track, course availability and entry into restricted classes.

Maria D'Anniballe
Undergraduate Advisor
FKART 118B
412-648-2101
mdaw@pitt.edu

To set up an appointment, go to https://haadepartmentadvising.acuityscheduling.com

Minor

Architecture-Design Minor

The Architecture-Design minor consists of 18 credits, distributed as follows.

Requirements for the minor

The minor in Architecture - Design provides an option for students majoring in fields such as Civil Engineering, Environmental Studies, History, Studio Arts, Urban Studies and for whom course work in architectural design and history will provide additional breadth in their studies of the built environment. The minor requires that students complete 18 credits, 12 of which are studio-based design courses and six of which will provide historical and theoretical background for thinking about architecture and the built environment.

Foundational course in architecture

- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT

Two courses in architectural design

Students must earn a letter grade of C or higher in ARC 0201 ARC 0201 - FOUNDATIONS STUDIO 1 to enroll in ARC 1201 ARC 1201 - ARCHITECTURE DESIGN STUDIO 1.

- ARC 0201 - FOUNDATIONS STUDIO 1
- ARC 1201 - ARCHITECTURE DESIGN STUDIO 1

One course in architectural history

- HAA 0040 - INTRODUCTION TO WESTERN ARCHITECTURE
- ARC 0153 - MEDIEVAL ARCHITECTURE

- HAA 0460 - ART IN PUBLIC: INCLUSION , IDENTITY, AND ACTIVISM
- ARC 0116 - MODERN ARCHITECTURE
- HAA 0510 - PITTSBURGH ARCHITEC/URBANISM
- HAA 0900 - SPECIAL TOPICS-ARCHITECTURAL STUDIES
- ARC 1152 - ROMAN ARCHITECTURE
- ARC 1154 - CONSTRUCTING THE GOTHIC
- HAA 1305 - EARLY RENAISSANCE ARCHITECTURE
- ARC 1156 - HIGH RENAISSANCE ARCHITECTURE
- ARC 1158 - ARCHITECTURE AND ENLIGHTENMENT
- ARC 1161 - MODERNITY, MODERNISM AND HOUSING
- ARC 1118 - ARCHITECTURE SINCE 1945
- ARC 1181 - PITTSBURGH ARCHITECTURE/URBANISM
- ARC 1136 - EARLY AMERICAN ARCHITECTURE
- ARC 1137 - AMERICAN ARCHITECTURE SINCE INDUSTRIALIZATION
- HAA 1630 - CHINA: VILLAGE & URBAN ARCHITECUTRAL SPACE
- HAA 1656 - JAPAN: ARCHITECTURE AS PERFORMATIVE SPACE
- HAA 1680 - JAPAN: ARTIST AND CITY
- ARC 1191 - ARCHITECTURE AND THE CITY IN CENTRAL EUROPE: 19TH AND 20TH CENTURIES
- ARC 0210 - SPECIAL TOPICS-ARCHITECTURE
- ARC 0300 - INTRODUCTION TO HISTORIC PRESERVATION
- ARC 1330 - GLOBAL PRESERVATION

Two co-requisites

ARC 1911 ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1 may be waived for students who have taken a course in AutoCAD in high school or the equivalent course in the Department of Civil Engineering in the Swanson School of Engineering - CEE 0109 CEE 0109 - COMPUTER METH IN CIVIL ENGRG 1.

SA 0130 SA 0130 - DRAWING STUDIO 1 may be waived for students who have taken art courses in high school.

- ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1
- SA 0130 - DRAWING STUDIO 1

Historic Preservation Minor

The minor in Historic Preservation is for students who are interested in a specialized focus on the preservation and documentation of historic architecture and the built environment.

Students pursuing the Historic Preservation minor must complete the following coursework, which comprises 18 credits.

Requirements for the minor

- ANTH 1541 - CULTURAL RESOURCE MANAGEMENT
- ARC 0300 - INTRODUCTION TO HISTORIC PRESERVATION
- ARC 1990 - ARCHITECTURAL STUDIES INTERNSHIP
  The internship must be conducted with an organization that pertains to the field of historic preservation and be approved by the director of the Architectural Studies program.

Three additional courses

Students pursuing this minor must complete three courses from the following list, for a total of at least nine credits.

- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT

- HAA 0510 - PITTSBURGH ARCHITEC/URBANISM or
- ARC 1181 - PITTSBURGH ARCHITECTURE/URBANISM

- ARC 1136 - EARLY AMERICAN ARCHITECTURE
- ARC 1137 - AMERICAN ARCHITECTURE SINCE INDUSTRIALIZATION
- ARC 0201 - FOUNDATIONS STUDIO 1
- ARC 1320 - DOCUMENTATION AND CONSERVATION STUDIO The Architectural Stuides program strongly recommends that students choose this course as one of the three from the lsit.
- ARC 1310 - PRESERVATION - TEXTS AND THEORY
- ARC 1330 - GLOBAL PRESERVATION

Certificate

Civil Engineering Certificate

Note: This certificate is available only to Architecture (BS) and Architectural Studies (BA) majors.

A certificate in elementary structural engineering for architectural studies majors is available under the auspices of the Swanson School of Engineering's Department of Civil and Environmental Engineering. It offers a technical, professional component to the major. The certificate consists of a minimum of 27 credits and includes courses in statics and particle dynamics, mechanics of materials, structural analysis, computer methods, concrete structures, and metal structures. Students must go to the Department of Civil and Environmental Engineering in 742 Benedum Hall to declare the Civil Engineering Certificate.

Prerequisite courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

One of the following courses

- CS 0007 - INTRODUCTION TO COMPUTER PROGRAMMING
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA

One of the following courses

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0235 - HONORS 1 - VARIABLE CALCULUS

One of the following courses

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 (Honors)

One of the following courses

- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2 (Honors)

Required courses

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0290 - DIFFERENTIAL EQUATIONS
- ENGR 0131 - STATICS FOR CIVIL AND ENVIRONMENTAL ENGINEERS
- ENGR 0141 - MECHANICS OF MATERIALS CIVIL AND ENVIRONMENTAL ENGINEERS
- CEE 1105 - MATERIALS OF CONSTRUCTION

- CEE 1330 - INTRODUCTION TO STRUCTURAL ANALYSIS

At least two of the following courses*

* Prerequisites apply

- CEE 1340 - CONCRETE STRUCTURES 1
- CEE 1341 - STEEL STRUCTURES 1
- CEE 2340 - CONCRETE STRUCTURES 2
- CEE 2341 - STEEL STRUCTURES 2
- CEE 2343 - PRESTRESSED CONCRETE

Department of Biological Sciences

Biological Sciences

The biological sciences major is intended for the biology student who wishes to develop an individualized combination of courses at the advanced level. The student is free to plan a curriculum of great breadth or to choose an area of specialization not offered as a major by the department. Most of the undergraduates in our department choose the biological sciences major. This major is suitable for those planning a career in which general familiarity with biological topics is desirable, such as jobs in scientific journalism, biological and pharmaceutical supply industries, biological or medical research, scientific libraries and museums, or in any industry where the products or by-products have potential biological impact. Completing the biological sciences major fulfills the basic science requirements for admission to medical, dental, and other health professional schools and to graduate biology programs.

Bioinformatics

This major is closed for enrollment as of fall 2019. Students enrolled in the program prior to fall 2019 have the option to complete this major or to transfer to the Computational Biology major. Students who choose to complete the Bioinformatics major must do so by the end of summer 2023.

Bioinformatics is the theory, application and development of computing tools to solve problems and create hypotheses in all areas of biological sciences. Biology in the post-genome world has been and continues to be transformed from a largely laboratory-based science to one that integrates experimental and information science. Bioinformatics has contributed to advances in biology by providing tools that handle datasets too large and/or complex for manual analysis. Examples of some of these tools include assembly of DNA sequences of entire genomes, gene finding algorithms, microarray expression analysis, molecular system modeling, and biomarker discovery from mass spectra. Computational tools are central to the organization, analysis, and harvesting of biological data at the level of macromolecules, cells, and systems. Consequently, there is a growing need for trained professionals who understand the languages of biology and computer science. Biologists trained in more traditional programs may not have a working knowledge of statistics and algorithms, whereas computer scientists trained in more traditional programs may not have a working knowledge of the chemistry and biology required in the field.

Computational Biology

Computational biology is a growing field of study in the life sciences. This major, which is administered by the Department of Biological Sciences in the Dietrich School and the Department of Computer Science in the School of Computing and Information, trains students in the computer programming, laboratory techniques, and other skills they will need to succeed in graduate school and in the workforce.

Ecology and Evolution

The field of ecology explores the interactive web of organisms and the environment. Studies in evolution consider the processes by which modern organisms have developed from ancestral ones. The ecology and evolution major is a good choice for students interested in the fundamental questions of the evolutionary origins of organisms and how they survive, or don't survive, in their changing habitats. Within this major, students have the opportunity for in-depth study of the morphological and physiological adaptations of a variety of animals, plants, and microorganisms to a changing world; the ecological relationship of organisms from the individual to the global scale; and the mechanisms that drive evolutionary change.

Employment opportunities in the ecological sciences have increased greatly in recent years. There continues to be a demand for well-trained professionals at all levels (BS, MS, and PhD). Government environmental agencies, commercial consulting and testing firms, waste management industries, research laboratories, and natural history and science museums are just a few of the career opportunities. Graduate departments of

ecology, evolution, environmental sciences, genetics, botany, public policy, and public health are actively seeking well-qualified students. The required chemistry, physics, and mathematics courses incorporate the requirements for admission to medical, dental, and other health professional schools. An ecology and evolution major could also serve as a springboard to a career in law.

Microbiology

Microbiology is the study of the biology of microscopic organisms: bacteria, viruses, algae, fungi, and protozoa. The methods used to study and manipulate these minute and mostly unicellular organisms differ from those used in most other biological investigations. Recombinant DNA technology uses microorganisms, particularly bacteria and viruses, to amplify DNA sequences and generate the encoded products. Moving genes from one microorganism to another permits application of microbial skills to solve medical and environmental problems. Many microorganisms are unique among living things in their ability to use gaseous nitrogen from the air or to degrade complex and resistant macromolecules in such materials as wood. By rearranging the genes that control these and other processes, scientists seek to engineer microorganisms that will process wastes, fertilize agricultural land, produce desirable biomolecules, and solve other problems inexpensively and safely.

Microbiologists pursue careers in many fields, including agricultural, environmental, food, and industrial microbiology; public health; resource management; basic research; education; and pharmaceuticals. Jobs in all these fields are available at the BS level as well as the MS and PhD levels. The microbiology major also incorporates the requirements expected for admission to medical, dental, and other health professional schools and to graduate schools in microbiology, molecular biology, biochemistry, and related disciplines.

Molecular Biology

Molecular biology emphasizes the study of molecules that make up an organism and the forces operating among these molecules. Increasingly, molecular biologists can also explore the genetic control of these molecules and thus define the developmental, cellular, and subcellular changes that occur during the dynamic processes of life. Virtually every question, whether in biochemistry, cell biology, developmental biology, or some other biological discipline, applies molecular biology, often as the prime approach, in its solution. Biochemical and molecular developments have revolutionized biological research, fueling the explosive growth in the biotechnology industry and rapid increase of molecular medicine.

The molecular biology major, with its two tracks (biochemistry or cell and developmental biology) provides a strong background for many science careers. Both tracks incorporate the requirements expected for admission to medical, dental, and other health professional schools and to graduate schools in biochemistry, cell and molecular biology, and related disciplines. Positions for molecular biologists at the BS, MS, and PhD levels are available in the biotechnology industries as well as in universities, medical schools, hospitals, government laboratories, research institutes, and public health institutions.

For more information on the Department of Biological Sciences and the majors it offers, see www.biology.pitt.edu.

Major

Bioinformatics, BS

In the Fall of 2019, the Bioinformatics, BS was inactive for students to enroll in. Students who were enrolled prior to the Fall 2019 term have the option to remain in the major or transfer to the Computational Biology major. Students who choose to complete the program under Bioinformatics must do so by Summer 2023 term.

Biological Sciences Requirements

Students in all five majors within the Department of Biological Sciences must follow general rules and fulfill certain general requirements in addition to those in their specific major:

- A total of 32 credits in biology must be taken (see specific course requirements for each major below). All biology courses taken for the major must be completed with a C or better. If a C- or lower is earned in a biology elective course that is not repeated, the course will be used in calculating the overall GPA in the major but will not be counted as part of the 32 credits required for the major.
- Co-requisite courses must be taken in chemistry, physics, and mathematics and/or statistics, as follows.
    - CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2, including the labs;

    - CHEM 0310 - ORGANIC CHEMISTRY 1 , CHEM 0320 - ORGANIC CHEMISTRY 2 , and CHEM 0345 - ORGANIC LABORATORY lectures and labs;
    - MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1;
    - Either MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or STAT 1000 - APPLIED STATISTICAL METHODS; and
    - Either the algebra-based physics courses PHYS 0110 - INTRODUCTION TO PHYSICS 1 and PHYS 0111 - INTRODUCTION TO PHYSICS 2, or the calculus-based physics courses PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED).
- A minimum GPA of 2.00 must be maintained in all biology courses and in the combined co-requisite courses. The Satisfactory/No Credit (S/NC) option may be used for only one biology course and for any of the co-requisite courses.
- Departmental writing (W) courses may be selected once the major is declared and count towards the 32 biology credits for the major.
- Opportunities for faculty-sponsored directed research and internship experiences are available and strongly encouraged. Academic credit awarded from the departmental W, directed research, and internship courses count as credit toward graduation, but not in determining the 32 biology credits required for the major. Students interested in departmental honors should contact department advisors for information.
- University Honors College equivalents for any of the above courses are accepted. Credit by examination is available only through appropriate AP scores for equivalents to BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1, BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1, BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2, and BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2 lectures and labs.

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Corequisite courses

Corequisite courses must be taken in chemistry, physics, and mathematics and/or statistics, including

- CHEM 0110 - GENERAL CHEMISTRY 1 which includes the lab
- CHEM 0120 - GENERAL CHEMISTRY 2 which includes the lab
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 0340 - ORGANIC CHEMISTRY LABORATORY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or
- STAT 1000 - APPLIED STATISTICAL METHODS

- PHYS 0110 - INTRODUCTION TO PHYSICS 1 and
- PHYS 0111 - INTRODUCTION TO PHYSICS 2
  or
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Note:

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Requirements

The undergraduate bioinformatics degree program at the University of Pittsburgh is operated jointly by the departments of biological sciences (www.biology.pitt.edu) and computer science (www.cs.pitt.edu). This program offers training that builds a solid foundation in chemistry, biology, computer science, mathematics, and statistics. The training will enable students to communicate fluently with experts across these disciplines and to have the skills necessary to apply computing tools to address contemporary problems in biology and medicine. It will enhance the professional opportunities for undergraduates to pursue careers in pure or applied research in academia, government, pharmaceutical, medical, or biotechnology sectors.

Advising for Bioinformatics majors is housed in both the Department of Biology and the Department of Computer Science. For information, contact one of the advisors.

Core courses (42 credits)

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0350 - GENETICS
- BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION
- CHEM 0310 - ORGANIC CHEMISTRY 1 *
- CHEM 0320 - ORGANIC CHEMISTRY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1221 - APPLIED REGRESSION
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA **
- CS 0445 - DATA STRUCTURES
- CS 0441 - DISCRETE STRUCTURES FOR CS
- CS 1501 - ALGORITHM IMPLEMENTATION

Note:

* CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2 are pre-requisites to taking CHEM 0310.

** Students without a background in programming will be encouraged to take CS 0007 - INTRODUCTION TO COMPUTER PROGRAMMING prior to taking CS 0401.

Upper Level Courses (22 credits)

- BIOSC 1540 - COMPUTATIONAL BIOLOGY

- BIOSC 1640 - COMPUTATIONAL BIOLOGY RESEARCH or
- CS 1640 - BIOINFORMATICS SOFTWARE DESIGN

- BIOSC 1901 - INDEPENDENT STUDY (total of four credits)* or
- CS 1950 - DIRECTED RESEARCH (total of four credits)*

Electives (12 credits)

Electives (12 credits) to be chosen from an approved list of courses in Statistics, Chemistry, Biological Sciences and/or Computer Science. With the approval of the Bioinformatics Program Committee, the student may take electives in other departments.

Note:

* Undergraduate Research is taken over multiple terms for variable credit. Four credits of undergraduate research are required for the major. Research can begin as early as the sophomore year and must be approved by Kirk Pruhs in the Department of Computer Science, or Paula Grabowski in the Department of Biological Sciences.

Capstone experience

BIOSC 1640 and CS 1640 satisfy the bioinformatics major capstone experience requirement. Capstone request must be made to Kirk Pruhs in the Department of Computer Science.

Additional requirements and restrictions

- Bioinformatics majors who have completed CS 0401 may not enroll in CS 0004 or CS 0007.
- BIOSC 1000 cannot be substituted for BIOSC 1810.
- CHEM 1810 can only be substituted for BIOSC 1810 if it is not possible for the student to schedule BIOSC 1810
- Students must complete at least one W-course in the major

- A grade of C or better is required in each of the core and upper level courses that are to count toward the major.
- This requirement also satisfies the Dietrich School requirement of a minimum GPA of 2.0 in major courses
- Elective courses for the major must be completed with a grade of C or better. If a C-or lower is earned in an elective course for the major and is not repeated, the course will be used to calculate the overall GPA but will not be counted toward the 32 credits required for the major.
- Students must earn a minimum GPA of 2.0 in the required chemistry and mathematics courses.
- No Bioinformatics major courses may be taken on an S/NC basis.

Honors major requirements

Honors in Bioinformatics is granted if, in addition to fulfilling all requirements for the major, the student:

- completes three semesters (3 x 2 credits) or the equivalent (summer counts as a semester equivalent) of undergraduate research together with a written honors thesis presented in the last semester of the senior year;
- maintains a GPA of 3.5 or above in all Bioinformatics major courses; and
- maintains an overall GPA of 3.25 or above.

Approved elective course list

Biological Sciences

- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1545 - THE MATHEMATICS OF BIOLOGY
- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION
- BIOSC 1830 - BIOCHEMISTRY LABORATORY
- BIOSC 1940 - MOLECULAR BIOLOGY
- BIOSC 1950 - MOLECULAR GENETICS LABORATORY

Computer Science

- CS 1510 - ALGORITHM DESIGN
- CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS
- CS 1555 - DATABASE MANAGEMENT SYSTEMS
- CS 1566 - INTRODUCTION COMPUTER GRAPHICS
- CS 1571 - INTRODUCTION TO ARTIFICIAL INTELLIGENCE
- CS 1645 - INTRODUCTION TO HIGH PERFORMANCE COMPUTING SYSTEMS

Chemistry

- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY
- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2

Statistics

- STAT 1301 - STATISTICAL PACKAGES
- STAT 1311 - APPLIED MULTIVARIATE ANALYSIS
- STAT 1321 - APPLIED TIME SERIES

Biological Sciences, BS

Biological Sciences Requirements

Students in all five majors within the Department of Biological Sciences must follow general rules and fulfill certain general requirements in addition to those in their specific major:

- A total of 32 credits in biology must be taken (see specific course requirements for each major below). All biology courses taken for the major must be completed with a C or better. If a C- or lower is earned in a biology elective course that is not repeated, the course will be used in calculating the overall GPA in the major but will not be counted as part of the 32 credits required for the major.
- Co-requisite courses must be taken in chemistry, physics, and mathematics and/or statistics, as follows.
    - CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2, including the labs;
    - CHEM 0310 - ORGANIC CHEMISTRY 1 , CHEM 0320 - ORGANIC CHEMISTRY 2 , and CHEM 0345 - ORGANIC LABORATORY lectures and labs;
    - MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1;
    - Either MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or STAT 1000 - APPLIED STATISTICAL METHODS; and
    - Either the algebra-based physics courses PHYS 0110 - INTRODUCTION TO PHYSICS 1 and PHYS 0111 - INTRODUCTION TO PHYSICS 2, or the calculus-based physics courses PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED).
- A minimum GPA of 2.00 must be maintained in all biology courses and in the combined co-requisite courses. The Satisfactory/No Credit (S/NC) option may be used for only one biology course and for any of the co-requisite courses.
- Departmental writing (W) courses may be selected once the major is declared and count towards the 32 biology credits for the major.
- Opportunities for faculty-sponsored directed research and internship experiences are available and strongly encouraged. Academic credit awarded from the departmental W, directed research, and internship courses count as credit toward graduation, but not in determining the 32 biology credits required for the major. Students interested in departmental honors should contact department advisors for information.
- University Honors College equivalents for any of the above courses are accepted. Credit by examination is available only through appropriate AP scores for equivalents to BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1, BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1, BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2, and BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2 lectures and labs.

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Corequisite courses

Corequisite courses must be taken in chemistry, physics, and mathematics and/or statistics, including

- CHEM 0110 - GENERAL CHEMISTRY 1 which includes the lab
- CHEM 0120 - GENERAL CHEMISTRY 2 which includes the lab
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 0340 - ORGANIC CHEMISTRY LABORATORY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or
- STAT 1000 - APPLIED STATISTICAL METHODS

- PHYS 0110 - INTRODUCTION TO PHYSICS 1 and
- PHYS 0111 - INTRODUCTION TO PHYSICS 2
  or
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Note:

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Biology Course Requirements

Completion of the biological sciences major requires a total of 32 credits in biology, including

17 credits of required courses

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2

- BIOSC 0350 - GENETICS or
- BIOSC 0355 - UHC GENETICS

- BIOSC 0370 - ECOLOGY or
- BIOSC 1130 - EVOLUTION

- BIOSC 1000 - BIOCHEMISTRY *

A minimum of 13 credits of upper-division courses

A minimum of 13 credits of upper-division courses, which must include two labs or one lab and one field course or one lab and BIOSC 1545 - THE MATHEMATICS OF BIOLOGY. Students may begin to take elective courses when they have completed the appropriate prerequisite courses; for example, some upper-division courses have only 0150 and 0160 as prerequisites whereas others have additional requirements. As part of these electives, students who declare a major in Biological Sciences on or after September 14, 2009 must complete one higher-level 3-credit BIOSC lecture class, defined as a course with prerequisites beyond BIOSC 0150 and BIOSC 0160.

Ecology and Evolution, BS

The field of ecology explores the interactive web of organisms and the environment. Studies in evolution consider the processes by which modern organisms have developed from ancestral ones. The Ecology and Evolution major is a good choice for students interested in the fundamental questions of the evolutionary origins of organisms and how they survive, or don't survive, in their changing habitats. Within this major, students have the opportunity for in-depth study of the morphological and physiological adaptations of a variety of animals, plants, and microorganisms to a changing world, the ecological relationships of organisms from the individual to the global scale, and the mechanisms that drive evolutionary change.

Employment opportunities in Ecology and Evolutionary Biology have increased greatly in recent years. There continues to be a demand for well-trained professionals at all levels (BS, MS, and PhD). Government environmental agencies, commercial consulting and testing firms, waste management industries, research laboratories, and natural history and science museums are just a few of the career opportunities. Graduate departments of ecology, evolution, environmental sciences, genetics, botany, public policy, and public health are actively seeking well-qualified students. The required chemistry, physics, and mathematics courses incorporate the requirements for admission to medical, dental, and other health-professional schools. An Ecology and Evolution major could also serve as a springboard to a career in law.

Requirements for the Ecology and Evolution major are described below.

Biological Sciences courses

Majors must complete 32 credits of Biological Sciences coursework as described below.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
  One of the following lab courses
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1
- BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
  One of the following laboratory courses.
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2
- BIOSC 0068 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 2
- BIOSC 0350 - GENETICS
  or
- BIOSC 0355 - UHC GENETICS

- BIOSC 0370 - ECOLOGY

- BIOSC 0390 - ECOLOGY LABORATORY
- BIOSC 1120 - BIOSTATISTICS
- BIOSC 1130 - EVOLUTION
- BIOSC 1131 - EVOLUTION LABORATORY
- BIOSC 1550 - ECOLOGY AND EVOLUTION SEMINAR
- BIOSC 0391 - ECOLOGY LABORATORY WRITING PRACTICUM
- BIOSC 1551 - ECOLOGY AND EVOLUTION SEMINAR WRITING PRACTICUM

Elective courses

Majors must complete nine credits of elective courses, including at least one field course, from the following lists.

Field course electives

Students must choose at least one field courses offered at the Pymatuning Laboratory of Ecology (PLE) (3 credits) or the Oakland campus (BIOSC 1221 - 1 credit) or an equivalent course approved by the Director of Undergraduate Studies. If the field course is less than 3 credits, additional credits must be added from the approved electives list to reach 9 credits total. PLE course offerings change annually; check the course schedule to see which courses are offered.

- BIOSC 1140 - BEHAVIORAL ECOLOGY
- BIOSC 1160 - FOREST ECOLOGY
- BIOSC 1170 - FRESHWATER ECOLOGY
- BIOSC 1180 - ECOLOGY OF AMPHIBIANS AND REPTILES
- BIOSC 1190 - AQUATIC ENTOMOLOGY
- BIOSC 1220 - ECOLOGICAL FIELD STUDIES
- BIOSC 1221 - URBAN ECOLOGICAL FIELD STUDIES
- BIOSC 1230 - ORNITHOLOGY
- BIOSC 1270 - ECOLOGY OF FISH
- BIOSC 1310 - WETLAND ECOLOGY AND MANAGEMENT
- BIOSC 1330 - FIELD BOTANY
- BIOSC 1340 - FIELD ENTOMOLOGY
- BIOSC 1360 - ECOLOGY OF FUNGI
- BIOSC 1390 - FIELD TECHNIQUES IN ECOLOGY AND CONSERVATION
- BIOSC 1400 - DISEASE ECOLOGY
- BIOSC 1420 - WILDLIFE MANAGEMENT
- BIOSC 1610 - CONSERVATION BIOLOGY

Lecture course electives

- ANTH 1601 - STRUCTURE AND FUNCTION
- ANTH 1603 - HUMAN ORIGINS
- ANTH 1605 - PRIMATE ANATOMY
- BIOSC 1000 - BIOCHEMISTRY
- BIOSC 1200 - VERTEBRATE MORPHOLOGY
- BIOSC 1275 - GENOMICS
- BIOSC 1320 - POPULATION BIOLOGY
- BIOSC 1350 - PLANT BIOLOGY
- BIOSC 1375 - TROPICAL BIOLOGY
- BIOSC 1435 - ENVIRONMENTAL PHYSIOLOGY OF ANIMALS
- BIOSC 1440 - ANIMAL BEHAVIOR
- BIOSC 1520 - DEVELOPMENTAL BIOLOGY
- BIOSC 1850 - MICROBIOLOGY

Co-requisite courses

Students choose one track for co-requisite courses:

Track 1: Chemiphysical

- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 0345 - ORGANIC LABORATORY
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- STAT 1000 - APPLIED STATISTICAL METHODS
  Either the algebra-based physics courses or the calculus-based physics courses.
- Algebra-based courses:
  - PHYS 0110 - INTRODUCTION TO PHYSICS 1
  - PHYS 0111 - INTRODUCTION TO PHYSICS 2
- Physics-based courses:
  - PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
  - PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Track 2: Quantitative

- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1221 - APPLIED REGRESSION
- STAT 1261 - PRINCIPLES OF DATA SCIENCE
- STAT 1301 - STATISTICAL PACKAGES

Track 3: Environmental

- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- GEOL 0055 - GEOLOGY LABORATORY
- GEOL 0820 - NATURAL DISASTERS
- GEOL 0840 - ENVIRONMENTAL SCIENCE
- GEOL 1030 - THE ATMOSPHERE, OCEANS AND CLIMATE
- GEOL 1445 - GIS, GPS, AND COMPUTER METHODS
- GEOL 1515 - ENVIRONMENTAL GEOCHEMISTRY
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- STAT 1000 - APPLIED STATISTICAL METHODS

Grade requirements

- Each required BIOSC course for the major must be completed with a grade of C or better.
- The elective courses for the major must also be completed with a grade of C or better.
- A minimum GPA of 2.0 in all departmental courses taken is required for graduation. If a C- or lower is earned in an elective course for the major but is not repeated, the course will be used to calculate the departmental GPA but will not be counted toward the 32 credits required for the major.
- Students must also earn a minimum GPA of 2.0 in the co-requisite Chemistry, Geology, Mathematics, Physics, and Statistics courses. A passing grade of C- or lower in a co-requisite course can be accepted, except for CHEM 0110 and CHEM 0120, if balanced by a higher grade in another co-requisite course so that the co-requisite GPA is 2.0 or higher. Students must pass CHEM 0110 and CHEM 0120 with a grade of C (not C-) or better for the major.
- Only one BIOSC course may be taken on a Satisfactory/No Credit (S/NC) basis.

University Honors College equivalent courses may be substituted for required or elective courses.

Microbiology, BS

Microbiology is the study of microscopic organisms, including viruses, bacteria, archaea, fungi, and protists. Microorganisms are important for both the good that they do (nutrient cycling, production of antibiotics, bioremediation, food production) and the bad (food poisoning, infectious diseases, epidemics). Our program provides intensive training in modern microbiology, including cutting-edge research in genomics and genetic engineering.

Microbiologists pursue careers in many fields, including agricultural, environmental, food, and industrial microbiology; public health; resource management; basic research; education; and pharmaceuticals. Jobs in all of these fields are available at the BS level as well as the MS and PhD levels. The microbiology major also incorporates the requirements expected for admission to medical, dental, and other health professional schools, and to graduate schools in microbiology, molecular biology, biochemistry, and related disciplines.

University Honors College equivalent courses may be substituted for required or elective courses.

Biological Sciences Requirements

Students in all five majors within the Department of Biological Sciences must follow general rules and fulfill certain general requirements in addition to those in their specific major:

- A total of 32 credits in biology must be taken (see specific course requirements for each major below). All biology courses taken for the major must be completed with a C or better. If a C- or lower is earned in a biology elective course that is not repeated, the course will be used in calculating the overall GPA in the major but will not be counted as part of the 32 credits required for the major.
- Co-requisite courses must be taken in chemistry, physics, and mathematics and/or statistics, as follows.
    - CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2, including the labs;
    - CHEM 0310 - ORGANIC CHEMISTRY 1 , CHEM 0320 - ORGANIC CHEMISTRY 2 , and CHEM 0345 - ORGANIC LABORATORY lectures and labs;
    - MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1;
    - Either MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or STAT 1000 - APPLIED STATISTICAL METHODS; and
    - Either the algebra-based physics courses PHYS 0110 - INTRODUCTION TO PHYSICS 1 and PHYS 0111 - INTRODUCTION TO PHYSICS 2, or the calculus-based physics courses PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED).
- A minimum GPA of 2.00 must be maintained in all biology courses and in the combined co-requisite courses. The Satisfactory/No Credit (S/NC) option may be used for only one biology course and for any of the co-requisite courses.
- Departmental writing (W) courses may be selected once the major is declared and count towards the 32 biology credits for the major.
- Opportunities for faculty-sponsored directed research and internship experiences are available and strongly encouraged. Academic credit awarded from the departmental W, directed research, and internship courses count as credit toward graduation, but not in determining the 32 biology credits required for the major. Students interested in departmental honors should contact department advisors for information.
- University Honors College equivalents for any of the above courses are accepted. Credit by examination is available only through appropriate AP scores for equivalents to BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1, BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1, BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2, and BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2 lectures and labs.

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Corequisite courses

Corequisite courses must be taken in chemistry, physics, and mathematics and/or statistics, including

- CHEM 0110 - GENERAL CHEMISTRY 1 which includes the lab
- CHEM 0120 - GENERAL CHEMISTRY 2 which includes the lab
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 0340 - ORGANIC CHEMISTRY LABORATORY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or
- STAT 1000 - APPLIED STATISTICAL METHODS

- PHYS 0110 - INTRODUCTION TO PHYSICS 1 and
- PHYS 0111 - INTRODUCTION TO PHYSICS 2
  or
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and

- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Note:

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Biological Sciences courses

Majors must complete a minimum of 32 credits of Biological Sciences coursework as described below.

Required courses

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2

- BIOSC 0350 - GENETICS or
- BIOSC 0355 - UHC GENETICS

- BIOSC 0370 - ECOLOGY or
- BIOSC 1130 - EVOLUTION

- BIOSC 1000 - BIOCHEMISTRY or
- BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION and
- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION

- BIOSC 1570 - MICROBIOLOGY SEMINAR
- BIOSC 1850 - MICROBIOLOGY
- BIOSC 1860 - MICROBIOLOGY LABORATORY
- BIOSC 1865 - MICROBIAL PHYSIOLOGY

Biology laboratory courses

Choose one course from each of the following groups.

- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1
- BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1

- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2
- BIOSC 0068 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 2

Writing-intensive course

Choose one of the following courses.

- BIOSC 1291 - EXPERIMENTAL GENETIC ENGINEERING WRITNG PRACTICUM
- BIOSC 1571 - MICROBIOLOGY SEMINAR WRITING PRACTICUM
- BIOSC 1741 - VIROLOGY LABORATORY WRITING PRACTICUM
- BIOSC 1861 - MICROBIOLOGY LABORATORY WRITING PRACTICUM

Biological Sciences elective courses

Choose six to seven credits of courses from the following lists. At least one of the selected courses must be a lab or field course.

Lecture courses

- BIOSC 1120 - BIOSTATISTICS
- BIOSC 1275 - GENOMICS
- BIOSC 1280 - MICROBIAL GENETIC ENGINEERING
- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1540 - COMPUTATIONAL BIOLOGY
- BIOSC 1545 - THE MATHEMATICS OF BIOLOGY
- BIOSC 1730 - VIROLOGY
- BIOSC 1760 - IMMUNOLOGY
- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION
  This course should be taken simultaneously with CHEM 1810 - CHEMICAL BIOLOGY.
- BIOSC 1940 - MOLECULAR BIOLOGY
- BIOSC 1999 - MEDICAL MICROBIOLOGY
- CHEM 1830 - SYNTHETIC BIOLOGY

Lab courses

- BIOSC 0352 - INTRODUCTION TO MOLECULAR GENETICS LABORATORY
- BIOSC 0390 - ECOLOGY LABORATORY
- BIOSC 1005 - INTRODUCTION TO BIOCHEMISTRY LAB
- BIOSC 1285 - GENOMICS LABORATORY
- BIOSC 1290 - EXPERIMENTAL GENETIC ENGINEERING LABORATORY
- BIOSC 1510 - CELL BIOLOGY LABORATORY
- BIOSC 1740 - VIROLOGY LABORATORY
- BIOSC 1950 - MOLECULAR GENETICS LABORATORY

Field courses

- BIOSC 1360 - ECOLOGY OF FUNGI
- BIOSC 1400 - DISEASE ECOLOGY

Molecular Biology - Biochemistry Track, BS

Biological Sciences Requirements

Students in all five majors within the Department of Biological Sciences must follow general rules and fulfill certain general requirements in addition to those in their specific major:

- A total of 32 credits in biology must be taken (see specific course requirements for each major below). All biology courses taken for the major must be completed with a C or better. If a C- or lower is earned in a biology elective course that is not repeated, the course will be used in calculating the overall GPA in the major but will not be counted as part of the 32 credits required for the major.
- Co-requisite courses must be taken in chemistry, physics, and mathematics and/or statistics, as follows.
  - CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2, including the labs;
  - CHEM 0310 - ORGANIC CHEMISTRY 1 , CHEM 0320 - ORGANIC CHEMISTRY 2 , and CHEM 0345 - ORGANIC LABORATORY lectures and labs;
  - MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1;
  - Either MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or STAT 1000 - APPLIED STATISTICAL METHODS; and
  - Either the algebra-based physics courses PHYS 0110 - INTRODUCTION TO PHYSICS 1 and PHYS 0111 - INTRODUCTION TO PHYSICS 2, or the calculus-based physics courses PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED).
- A minimum GPA of 2.00 must be maintained in all biology courses and in the combined co-requisite courses. The Satisfactory/No Credit (S/NC) option may be used for only one biology course and for any of the co-requisite courses.
- Departmental writing (W) courses may be selected once the major is declared and count towards the 32 biology credits for the major.

- Opportunities for faculty-sponsored directed research and internship experiences are available and strongly encouraged. Academic credit awarded from the departmental W, directed research, and internship courses count as credit toward graduation, but not in determining the 32 biology credits required for the major. Students interested in departmental honors should contact department advisors for information.
- University Honors College equivalents for any of the above courses are accepted. Credit by examination is available only through appropriate AP scores for equivalents to BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1, BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1, BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2, and BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2 lectures and labs.

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Corequisite courses

Corequisite courses must be taken in chemistry, physics, and mathematics and/or statistics, including

- CHEM 0110 - GENERAL CHEMISTRY 1 which includes the lab
- CHEM 0120 - GENERAL CHEMISTRY 2 which includes the lab
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 0340 - ORGANIC CHEMISTRY LABORATORY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or
- STAT 1000 - APPLIED STATISTICAL METHODS

- PHYS 0110 - INTRODUCTION TO PHYSICS 1 and
- PHYS 0111 - INTRODUCTION TO PHYSICS 2
  or
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Note:

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Biological Science Course Requirements

Completion of the molecular biology major requires a total of 32 credits in biology, including

20 credits of required courses:

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2

- BIOSC 0350 - GENETICS or
- BIOSC 0355 - UHC GENETICS

- BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION
- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION
- BIOSC 1940 - MOLECULAR BIOLOGY

In addition, students select one upper-division elective

In addition, students select one upper-division elective (either BIOSC 0370 - ECOLOGY or any BIOSC course numbered above 1010) and complete the course work in one of the following two tracks:

Biochemistry Track

- BIOSC 1470 - BIOPHYSICAL CHEMISTRY or
- CHEM 1410 - PHYSICAL CHEMISTRY 1 and
- CHEM 1420 - PHYSICAL CHEMISTRY 2

- BIOSC 1580 - BIOCHEMISTRY SEMINAR
- BIOSC 1830 - BIOCHEMISTRY LABORATORY
- BIOSC 1950 - MOLECULAR GENETICS LABORATORY

- BIOSC 1581 - BIOCHEMISTRY SEMINAR WRITING PRACTICUM or
- BIOSC 1831 - BIOCHEMISTRY LABORATORY WRITING PRACTICUM or
- BIOSC 1951 - MOLECULAR GENETICS LABORATORY WRITING PRACTICUM (Biochemistry)

Molecular Biology - Cell and Developmental Biology Track, BS

Biological Sciences Requirements

Students in all five majors within the Department of Biological Sciences must follow general rules and fulfill certain general requirements in addition to those in their specific major:

- A total of 32 credits in biology must be taken (see specific course requirements for each major below). All biology courses taken for the major must be completed with a C or better. If a C- or lower is earned in a biology elective course that is not repeated, the course will be used in calculating the overall GPA in the major but will not be counted as part of the 32 credits required for the major.
- Co-requisite courses must be taken in chemistry, physics, and mathematics and/or statistics, as follows.
    - CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2, including the labs;
    - CHEM 0310 - ORGANIC CHEMISTRY 1 , CHEM 0320 - ORGANIC CHEMISTRY 2 , and CHEM 0345 - ORGANIC LABORATORY lectures and labs;
    - MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1;
    - Either MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or STAT 1000 - APPLIED STATISTICAL METHODS; and
    - Either the algebra-based physics courses PHYS 0110 - INTRODUCTION TO PHYSICS 1 and PHYS 0111 - INTRODUCTION TO PHYSICS 2, or the calculus-based physics courses PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED).
- A minimum GPA of 2.00 must be maintained in all biology courses and in the combined co-requisite courses. The Satisfactory/No Credit (S/NC) option may be used for only one biology course and for any of the co-requisite courses.
- Departmental writing (W) courses may be selected once the major is declared and count towards the 32 biology credits for the major.
- Opportunities for faculty-sponsored directed research and internship experiences are available and strongly encouraged. Academic credit awarded from the departmental W, directed research, and internship courses count as credit toward graduation, but not in determining the 32 biology credits required for the major. Students interested in departmental honors should contact department advisors for information.
- University Honors College equivalents for any of the above courses are accepted. Credit by examination is available only through appropriate AP scores for equivalents to BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1, BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1, BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2, and BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2 lectures and labs.

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Corequisite courses

Corequisite courses must be taken in chemistry, physics, and mathematics and/or statistics, including

- CHEM 0110 - GENERAL CHEMISTRY 1 which includes the lab
- CHEM 0120 - GENERAL CHEMISTRY 2 which includes the lab
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2

- CHEM 0340 - ORGANIC CHEMISTRY LABORATORY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or
- STAT 1000 - APPLIED STATISTICAL METHODS

- PHYS 0110 - INTRODUCTION TO PHYSICS 1 and
- PHYS 0111 - INTRODUCTION TO PHYSICS 2
  or
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Note:

Updated information about the department, major requirements, and course offerings is available on the department's Web site, www.biology.pitt.edu.

Biological Science Course Requirements

Completion of the molecular biology major requires a total of 32 credits in biology, including

20 credits of required courses:

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2

- BIOSC 0350 - GENETICS or
- BIOSC 0355 - UHC GENETICS

- BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION
- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION
- BIOSC 1940 - MOLECULAR BIOLOGY

In addition, students select one upper-division elective

In addition, students select one upper-division elective (either BIOSC 0370 - ECOLOGY or any BIOSC course numbered above 1010) and complete the course work in one of the following two tracks:

Cell and Developmental Biology Track

- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1520 - DEVELOPMENTAL BIOLOGY
- BIOSC 1560 - CELL AND DEVELOPMENTAL BIOLOGY SEMINAR

- BIOSC 1511 - CELL BIOLOGY LABORATORY WRITING PRACTICUM or
- BIOSC 1531 - DEVELOPMENTAL BIOLOGY LABORATORY WRITING PRACTICUM or
- BIOSC 1561 - CELL DEVELOPMENTAL BIOLOGY SEMINAR WRITNG PRACTICUM or
- BIOSC 1831 - BIOCHEMISTRY LABORATORY WRITING PRACTICUM or
- BIOSC 1951 - MOLECULAR GENETICS LABORATORY WRITING PRACTICUM (Cell and Developmental Biology)

Two laboratories selected from among

- BIOSC 1510 - CELL BIOLOGY LABORATORY

- BIOSC 1530 - DEVELOPMENTAL BIOLOGY LABORATORY
- BIOSC 1830 - BIOCHEMISTRY LABORATORY
- BIOSC 1950 - MOLECULAR GENETICS LABORATORY

Joint Major

Computational Biology, BS

Computational Biology Requirements

Computational biology is a growing field of study in the life sciences. This major, which is administered by the Department of Biological Sciences in the Dietrich School and the Department of Computer Science in the School of Computing and Information, trains students in the computer programming, laboratory techniques, and other skills they will need to succeed in graduate school and in the workforce. This major requires completion of 64 credits of coursework, detailed as follows.

Students may declare a major in Computational Biology after completing the following courses or their equivalents with a letter grade of C or higher.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- CS 0011 - INTRODUCTION TO COMPUTING FOR SCIENTISTS

Transfer students who have finished these requirements prior to admission to the University of Pittsburgh are asked to complete one term of course work, including at least one BIOSC course that counts toward the major, before declaring within the Dietrich School. Transfer students applying to the School of Computing and Information who have finished these requirements prior to admission to the University of Pittsburgh may be admitted directly into the major - note, transfer application requirements for SCI are outlined in the Catalog under "Admission Requirements and Procedures ."

Biological Sciences courses

All of the following courses are required for the major.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1 or
- BIOSC 0155 - HONORS FOUNDATIONS OF BIOLOGY 1

- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2 or
- BIOSC 0165 - HONORS FOUNDATIONS OF BIOLOGY 2

- BIOSC 0350 - GENETICS
- BIOSC 1000 - BIOCHEMISTRY
  *Students may alternately choose BIOSC 1810 MACROMOLECULAR STRUCTURE AND FUNCTION and BIOSC 1820 METABOLIC PATHWAYS AND REGULATION in lieu of BIOSC 1000. In this case, BIOSC 1820 becomes the elective course.

Computer Science courses

All of the following courses are required for the major.

- CS 0011 - INTRODUCTION TO COMPUTING FOR SCIENTISTS
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0441 - DISCRETE STRUCTURES FOR CS
- CS 0445 - DATA STRUCTURES
- CS 1501 - ALGORITHM IMPLEMENTATION
- CS 1656 - INTRODUCTION TO DATA SCIENCE

Computational Biology courses

All of the following courses are required for the major.

- BIOSC 1540 - COMPUTATIONAL BIOLOGY

- BIOSC 1542 - COMPUTATIONAL GENOMICS or
- BIOSC 1544 - SIMULATION AND MODELING

- BIOSC 1630 - COMPUTATIONAL BIOLOGY SEMINAR

Capstone course

Students must choose one of the following capstone courses.

- BIOSC 1640 - COMPUTATIONAL BIOLOGY RESEARCH
- CS 1640 - BIOINFORMATICS SOFTWARE DESIGN

Co-requisite Chemistry courses

All of the following courses are required for the major.

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

Co-requisite Mathematics and Statistics courses

Both of the following courses are required for the major.

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- STAT 1000 - APPLIED STATISTICAL METHODS

Elective courses

Students must select one course from the following list.

- BIOSC 0351 - GENETICS LABORATORY
- BIOSC 0370 - ECOLOGY
- BIOSC 1005 - INTRODUCTION TO BIOCHEMISTRY LAB
- BIOSC 1130 - EVOLUTION
- BIOSC 1285 - GENOMICS LABORATORY
- BIOSC 1320 - POPULATION BIOLOGY
- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1520 - DEVELOPMENTAL BIOLOGY
- BIOSC 1760 - IMMUNOLOGY
- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION
  * This course must be taken in conjunction with BIOSC 1810 MACROMOLECULAR STRUCTURE AND FUNCTION; the pair of courses are taken in lieu of BIOSC 1000 BIOCHEMISTRY.
- BIOSC 1850 - MICROBIOLOGY
- BIOSC 1940 - MOLECULAR BIOLOGY
- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 1460 - INTRO MODERN COMPUTATIONAL SCI
- CHEM 1830 - SYNTHETIC BIOLOGY
- CS 1502 - FORMAL METHODS IN COMPUTER SCIENCE

- CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS
- CS 1555 - DATABASE MANAGEMENT SYSTEMS
- CS 1566 - INTRODUCTION COMPUTER GRAPHICS
- CS 1675 - INTRODUCTION TO MACHINE LEARNING
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- NROSCI 1000 - INTRO TO NEUROSCIENCE
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
- STAT 1221 - APPLIED REGRESSION

Additional Requirements

Writing (W) requirement

Dietrich School students must complete at least one W-course in the major. BIOSC 1630 - COMPUTATIONAL BIOLOGY SEMINAR meets this requirement.

Grade requirements

All courses offered by the departments of Biological Sciences and Computer Science must be completed with a letter grade of C or better.

Co-Requisite courses

Students must complete co-requisite courses in the departments of Mathematics, Statistics, and Chemistry with an overall average of C or better, with the exceptions of CHEM 0110 GENERAL CHEMISTRY 1 and CHEM 0120 GENERAL CHEMISTRY 2. Students must earn letter grades of C or better in each of these classes.

Honors

A Dietrich School student may achieve honors in the Department of Biological Sciences by meeting these requirements:

1. Maintain a minimum GPA of 3.25;
2. Complete a faculty-supported research project; and
3. Complete an Honors Thesis. Details about the required thesis are available at www.biology.pitt.edu/undergraduate/advising-and-support/honors.

A School of Computing and Information student may achieve honors in the Department of Computer Science by meeting these requirements:

1. Maintain a minimum overall GPA of 3.25; and
2. Maintain a major GPA (CS and Biological Science courses) of 3.5; and
3. Complete an additional major elective course with a grade of A.

Satisfactory/No Credit option

One core course required for the major may be taken on an S/NC basis. Co-requisite courses may be taken on an S/NC basis subject to School limitations.Please check with your School for specific information on S/NC grades.

Restrictions

- All BIOSC courses at the 0800-level are designed for non-majors and therefore do not count toward the major.
- Independent study and independent research credits do not count toward the major. The Department of Biological Sciences encourages students to seek out these experiences in order to enhance their education.

Certificate

Life Sciences Research Certificate

The goals of this certificate program are to enable students to: understand and apply key concepts in designing and performing authentic experimental research; learn and practice good science communication, ethics and responsible conduct in research; develop research practices and

critical thinking skills needed for a career in research; and compile evidence of rigorous training in research for applicants to jobs and graduate programs. Students must complete four terms of inquiry-based research in lab or field settings under faculty mentorship, overseen by Research Certificate Oversight Committee, two courses about research methods, three courses focusing on quantitative skills, one course in history and philosophy of science, and written and oral presentations of their research.

Application Requirements

Prerequisites

1. Introductory Biology. Completed **two** terms of introductory biology, with a grade of **C** [not C-] or above. Transfers or students with AP/IB credit may be exempt from part of this requirement.
2. Completed 2 credits of mentored research in a Certificate-approved faculty laboratory (one term; min. 140 hrs.; BIOSC 1903/BIOSC 1904 or NROSCI 1901/NROSCI 1961 or equivalent) **and** have a letter of support from the faculty sponsor.
3. GPA. If students have a cumulative GPA of 2.75 or lower after completing the initial term of research, the faculty sponsor must comment in their letter of support on whether the student is likely to meet the rigorous demands of the Certificate.

Bio 1: Choose one (each totals 4 cr.)

- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1 or
- BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1
  and
- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1 or
- BIOSC 0715 - UHC FOUNDATIONS OF BIOLOGY 1

Bio 2: Choose one (each totals 4 cr.)

- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2 or
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2
  and
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2 or
- BIOSC 0716 - UHC FOUNDATIONS OF BIOLOGY 2

Requirements to Complete the Certificate

Mentored Research in Life Sciences

- Components of mentored research projects: Formulation of hypotheses, experimental design, data collection, data interpretation, drawing conclusions supported by the data. Presentation of research findings, understanding the pertinent scientific literature, developing new knowledge, and development of a path towards research independence.
- Research credit requirements: Three additional terms (each term; min. 140 hours.; BIOSC 1903/BIOSC 1904 or NROSCI 1901/NROSCI 1961 or equivalent.) of research for a total of at least 8 credits or credit equivalents. BIOSC 1903/BIOSC 1904 and NROSCI 1901 /NROSCI 1961 must be approved and credits awarded according to departmental procedures. The final 2 terms of research must be with the same faculty mentor. Research equivalents must be approved by the RCOC.
- Pre-planning and Reporting for each Term: Pre-planning and Reporting: In the last week of classes before the next term of research (see B above), students must submit a 1-2 page report and prospectus summarizing accomplishments and aims for the next term. RCOC determines whether the research can count towards the Certificate before the end of the add/drop period. Oversight: Reporting documents must be co-signed by the faculty sponsor (and co-sponsor if any).
- Choice of Research Faculty: Research-active faculty in the Departments of Biological Sciences or Neuroscience may sponsor students for research in their labs. Faculty sponsors in other A&S departments or other University of Pittsburgh schools must be approved by RCOC.
- Optional Off-campus Research Term: One term of off-campus research may be approved (e.g. summer fellowship or study abroad). Submit in advance a 1-page description to RCOC of the project and the research environment plus a letter from the research advisor confirming commitment to the ≥140 hours of research activity.

Quantitative Skills Courses - Statistics and Mathematics

Complete three courses from this list (9 credits).

- BIOSC 1545 - THE MATHEMATICS OF BIOLOGY
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- MATH 0290 - DIFFERENTIAL EQUATIONS
- MATH 1380 - MATH BIOLOGY
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1221 - APPLIED REGRESSION
- STAT 1211 - APPLIED CATEGORICAL DATA ANLYSIS
- STAT 1251 - STATISTICAL QUALITY CONTROL
- STAT 1241 - APPLIED SAMPLING
- STAT 1311 - APPLIED MULTIVARIATE ANALYSIS
- STAT 1321 - APPLIED TIME SERIES

Graduate level options for the certificate:

- BIOST 2041 - INTRODUCTION TO STATISTICAL METHODS 1
- BIOST 2011 - PRINCIPLES OF STATISTICAL REASONING
- BIOST 2012 - BAYESIAN & EMPIRICAL BAYES STAT

History and Philosophy of Science Courses

Complete one course from this list (3 credits).

- HPS 0427 - MYTH AND SCIENCE
- HPS 0437 - DARWINISM AND ITS CRITICS
- HPS 0430 - GALILEO AND CREATION OF MODERN SCIENCE

- HPS 0515 - MAGIC, MEDICINE AND SCIENCE or
- HIST 0089 - MAGIC, MEDICINE AND SCIENCE

- HPS 0611 - PRINCIPLES OF SCIENTIFIC REASONING
- HPS 1620 - PHILOSOPHY OF BIOLOGY
- HPS 1625 - PHILOSOPHY OF MEDICINE
- HPS 1508 - CLASSICS IN HISTORY OF SCIENCE
- HPS 1653 - INTRO TO PHILOSOPHY OF SCIENCE
- HPS 1670 - PHILOSOPHY OF NEUROSCIENCE
- HPS 1800 - SPEC TOPICS HIST & PHIL OF SCI

Research Methods Courses

- Complete two Research Methods courses, one in research communication and one in research mechanics. It is recommended that the research courses be in the student's major department.
- Be enrolled in the Certificate and performing research in a Certificate-approved lab during the same term as enrolled in these courses. Courses may be taken in any order. Substitution of other Research Methods courses must be pre-approved by RCOC.
- BIOSC 1906 - RESEARCH COMMUNICATION: COMMUNICATION IN LIFE SCIENCES RESEARCH
- BIOSC 1907 - RESEARCH DECONSTRUCTION: UNDER THE HOOD OF LIFE SCIENCES RESEARCH
- NROSCI 2014 - SPEAKING OF SCIENCE

Presenting Research

The student must present their research at two scientific meetings or symposia, at least one venue must be outside of major and research Departments. Ex.: Honors College Research Fair, Science20xx, Duquesne Summer Undergraduate Research Symposium, regional or national scientific meeting. Presentation and abstract must be designed and delivered by the student and approved by the research faculty advisor and RCOC. The research abstract and a copy of poster or talk must be submitted to RCOC.

Research paper

The student will submit a manuscript describing the research completed in the final research experience spanning at least two consecutive terms. This will be in the form of a research manuscript. The paper must be submitted to the faculty sponsor and the RCOC by the last week of classes before finals week. The paper must be approved by the faculty sponsor and RCOC. The same final research paper may be considered for satisfying both Departmental Honors and the Research Certificate, provided it fulfills other requirements of the Department.

Portfolio Documentation

Upon registration for the Certificate, students must start (and regularly update) their electronic Portfolio, documenting their progress towards Certificate completion. Each proposal, presentation, research report, and other Certificate-related materials must be collated in the Portfolio. The Portfolio allows students, faculty, and advisors to review progress towards the Certificate, and provides coherent documentation of research proficiency when applying for employment or graduate school admission.

GPA Requirements

The student must remain in good academic standing (minimum cumulative GPA 2.00); if students have a cumulative GPA of 2.75 or lower after completing the initial term of research, the faculty sponsor for that research must comment in writing their letter of support on whether the student is likely to meet the rigorous demands of the Certificate.

Advising

Majors in the Departments of Biological Sciences or Neuroscience will be advised through their departments. Students outside of these majors will be assigned an advisor within one of these majors.

Students conducting research with a faculty member who does not work in the Departments of Biological Sciences or Neuroscience must have their research faculty sponsor complete a Faculty Mentor Application unless they are a CNUP faculty member. Students must submit the faculty mentor application with their application for the certificate.

Department of Chemistry

Chemistry, as a central science, is involved in natural processes occurring in living things, the earth, the oceans, and the atmosphere. The chemical industry provides materials to feed, clothe, and house mankind; drugs to combat disease; and processes to provide energy. Chemistry plays a role in high technology fields such as molecular biology, microelectronics, drug design, and ceramics.

The American Chemical Society (ACS)-certified chemistry degree includes core chemistry courses and electives. Special options are available for students with specific interests in combining chemistry with other subjects, such as bioscience, business, communication, computer science, education, and polymer science. These options allow students to take additional courses that provide an in-depth introduction to the subject of choice and are directly relevant to individual career goals.

The Bachelor of Science degree in chemistry prepares students for a career in business or industry or for advanced study in chemistry. Combined with core biology courses, the chemistry major is frequently selected as the preferred major for admission to the graduate health professions, including medical and dental school. In combination with an education option, the chemistry major prepares students for a certification program leading to a career in secondary science teaching. Chemists at all levels of training have a wide variety of industrial and corporate career opportunities in agricultural chemistry, food chemistry, environmental science, petrochemicals, pharmaceuticals, semiconductors and electronics, and fine chemicals, as well as in basic research. Many opportunities are available for chemistry majors with skills in business (sales, technical marketing, management), communications (technical writing, journalism), and computer science (programming, database management, information science). For more information on the ACScertified degree and degree options as well as the Department of Chemistry, see www.chem.pitt.edu.

Major

Chemistry, BS

Major Requirements

The requirements for the ACS-certified major in chemistry are as follows.

Required Chemistry courses

- CHEM 0110 - GENERAL CHEMISTRY 1 and
- CHEM 0120 - GENERAL CHEMISTRY 2
  or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1 and
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY
- CHEM 0260 - INTRODUCTION TO ANALYTICAL CHEMISTRY LAB

- CHEM 0310 - ORGANIC CHEMISTRY 1 and
- CHEM 0320 - ORGANIC CHEMISTRY 2
  or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1 and
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CHEM 0345 - ORGANIC LABORATORY
- CHEM 1000 - MATHEMATICS FOR CHEMISTRY
  This course may be replaced by MATH 0240.
- CHEM 1130 - INORGANIC CHEMISTRY
- CHEM 1140 - ADVANCED INORGANIC LABORATORY
- CHEM 1250 - INSTRUMENTAL ANALYSIS
- CHEM 1255 - INSTRUMENTAL ANALYSIS LAB
- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CHEM 1430 - PHYSICAL CHEMISTRY LABORATORY 1
- CHEM 1440 - PHYSICAL CHEMISTRY LABORATORY 2

Required co-requisite courses in Math and Physics

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)
- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING

Electives

At least two credits must be completed in the following list of approved chemistry or science courses.

For American Chemical Society (ACS) certification, students must complete their electives in a biochemistry course - BIOSC 1000 - BIOCHEMISTRY or BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION.

Approved elective courses

- BIOSC 0350 - GENETICS
- BIOSC 0355 - UHC GENETICS
- BIOSC 0370 - ECOLOGY
- BIOSC 1000 - BIOCHEMISTRY
- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION

- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION
- BIOSC 1830 - BIOCHEMISTRY LABORATORY
- BIOSC 1850 - MICROBIOLOGY
- BIOSC 1940 - MOLECULAR BIOLOGY
- CHEM 1260 - INTERMEDIATE ANALYTICAL CHEMISTRY
- CHEM 1310 - SYNTHETIC ORGANIC CHEMISTRY
- CHEM 1380 - TECHNIQUES OF ORGANIC RESEARCH
- CHEM 1460 - INTRO MODERN COMPUTATIONAL SCI
- CHEM 1600 - SYNTHESIS & CHARCTRZTN POLYMERS
- CHEM 1605 - SYNTH & CHARCTRZTN POLYMERS LAB
- CHEM 1620 - ATOMS, MOLECULES AND MATERIALS
- CHEM 1700 - UNDERGRADUATE RESEARCH SEMINAR
- CHEM 1710 - UNDERGRADUATE RESEARCH
- CHEM 1720 - UNDERGRAD TEACHING EXPERIENCE
- CHEM 1810 - CHEMICAL BIOLOGY
- Any CHEM course at the 2000-level or higher except CHEM 2700.
- CS 0441 - DISCRETE STRUCTURES FOR CS
- CS 0445 - DATA STRUCTURES
- GEOL 1001 - MINERALOGY
- MATH 0250 - MATRIX THEORY & DIFFT EQUATIONS
- STAT 1000 - APPLIED STATISTICAL METHODS

GPA requirement

The chemistry major must earn a 2.00 GPA in all departmental courses. Chemistry majors may use the S/NC option in all required physics and mathematics courses and in CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2.

Notes

To graduate with departmental honors, the student must have an overall GPA of at least 3.00, have a GPA of at least 3.25 in required chemistry courses, earn 2 credits in CHEM 1710 - UNDERGRADUATE RESEARCH, and earn 1 credit in CHEM 1711 - UNDGR RESEARCH WRITING PRACTICUM.

The chemistry department offers options in bioscience, business, communications, photonics, education, and material science. Each chemistry option allows for a waiver of CHEM 1440 - PHYSICAL CHEMISTRY LABORATORY 2, CHEM 1140 - ADVANCED INORGANIC LABORATORY, and the 2-credit science elective required for the ACS-certified degree. Specific information on the options program is available from the department.

Minor

Chemistry Minor

Requirements

Due to the integral role that chemistry plays in many other majors (including life sciences, physical sciences, and engineering), students wishing to receive formal recognition of their work in chemistry may choose to pursue the official minor as outlined below:

18-19 Credits

- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
  or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1
- CHEM 0720 - UHC GENERAL CHEMISTRY 2
  or
- CHEM 0760 - UHC GENERAL CHEMISTRY FOR ENGINEERS 1

- CHEM 0960 - GENERAL CHEM FOR ENGINEERS 1
- CHEM 0970 - GENERAL CHEM FOR ENGINEERS 2

Three of the following LECTURE courses:

- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 1130 - INORGANIC CHEMISTRY
- CHEM 1250 - INSTRUMENTAL ANALYSIS
- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2

- BIOSC 1000 - BIOCHEMISTRY or
- BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION

Two credits of the following LABORATORY courses:

- CHEM 0260 - INTRODUCTION TO ANALYTICAL CHEMISTRY LAB
- CHEM 0345 - ORGANIC LABORATORY
- CHEM 1140 - ADVANCED INORGANIC LABORATORY
- CHEM 1255 - INSTRUMENTAL ANALYSIS LAB
- CHEM 1430 - PHYSICAL CHEMISTRY LABORATORY 1
- CHEM 1440 - PHYSICAL CHEMISTRY LABORATORY 2

Department of Classics

Classics is an interdisciplinary program devoted to the study of the ancient Greek and Roman civilizations. Students may focus on the classics language track or the classical civilization track. Besides the sequences in the Greek, Latin, and Sanskrit languages, the department offers courses in Greek and Roman literature (including comparative literature), mythology, linguistics, history, culture, and philosophy.

The classics language track requires study of texts in the original languages, while the classical civilization track makes use of these same texts in English translations. Both classics tracks qualify graduates for appropriate careers in teaching, but can also be used as preparation for nonclassical academic and professional disciplines such as business, law, and medicine. The study of classics provides a background for the study of Romance and other languages, assists in the proper use of English, and underlies any understanding of Western civilization. For more information on the major and the Department of Classics, see http://www.classics.pitt.edu/.

Major

Classics - The Classical Civilization Track, BA

Required courses

- CLASS 0010 - GREEK CIVILIZATION
- CLASS 0020 - ROMAN CIVILIZATION

Two of the following courses

- GREEK 0011 - BEGINNING ANCIENT GREEK 1
- GREEK 0021 - BEGINNING ANCIENT GREEK 2
- GREEK 0210 - INTERMEDIATE GREEK: PROSE
- GREEK 0220 - INTERMEDIATE GREEK: VERSE
- LATIN 0011 - BEGINNING LATIN 1
- LATIN 0021 - BEGINNING LATIN 2

- LATIN 0210 - INTERMEDIATE LATIN: PROSE
- LATIN 0220 - INTERMEDIATE LATIN: VERSE

Courses in the area of concentration

Students must complete three CLASS courses in the area of concetration they have chosen. These courses should be selected in consultation with the major advisor.

Electives

Students must complete one elective course in three of the following areas.

- Ancient Archeology
- Art
- Culture
- History
- Language
- Literature
- Philosophy
- Science

Classics major general rules and requirements

Students have combined a major in classics with a second major or certificate such as: anthropology; biology; communication; history; history and philosophy of science; history of art and architecture; nonclassical languages and literatures; psychology; and gender, sexuality, and women's studies. Students planning graduate study in classics may be required to obtain reading competency in German, French, or Italian. Such study might begin during the course of completing the undergraduate major or may be undertaken in graduate school.

Rules and requirements

- The Classics major requires a minimum of 30 credits, distributed as directed by the chosen track.
- Students must have an overall 2.00 GPA in courses counting toward the major.
- No more than two courses in the Greek or Latin language tracks may be taken with the S/NC grade option. No more than four courses in Classical Civilization track may be taken with the S/NC grade option.
- Credit by examination is generally not granted, except for placement in the language sequences. The department will consider students with special circumstances.
- Students may either enroll in one of the W courses offered by the department or arrange with the instructor of an upper-level course for the addition of one credit of writing practicum.
- Majors who have reached the end of the junior year with a GPA in departmental courses of 3.50 or higher may, in conjunction with a senior-level course, write an honors essay. Acceptance of the essay by the department will qualify the student for graduating with departmental honors in Classics.

Classics - The Classics Language Track: Greek and Latin, BA

Greek language track - required courses

- GREEK 0011 - BEGINNING ANCIENT GREEK 1
- GREEK 0021 - BEGINNING ANCIENT GREEK 2
- GREEK 0210 - INTERMEDIATE GREEK: PROSE
- GREEK 0220 - INTERMEDIATE GREEK: VERSE
- GREEK 1700 - GREEK PROSE COMPOSITION

Greek language track: Select two of the following GREEK courses.

- GREEK 1300 - GREEK AUTHORS 1

- GREEK 1302 - GREEK AUTHORS 2
- GREEK 1420 - ADVANCED READINGS IN GREEK PHILOSOPHY
- GREEK 1902 - DIRECTED STUDY FOR UNDERGRADS

Greek language track: Select two of the following LATIN courses.

- LATIN 0011 - BEGINNING LATIN 1
- LATIN 0021 - BEGINNING LATIN 2
- LATIN 0210 - INTERMEDIATE LATIN: PROSE
- LATIN 0220 - INTERMEDIATE LATIN: VERSE

Latin language track - required courses

- LATIN 0011 - BEGINNING LATIN 1
- LATIN 0021 - BEGINNING LATIN 2
- LATIN 0210 - INTERMEDIATE LATIN: PROSE
- LATIN 0220 - INTERMEDIATE LATIN: VERSE

Latin language track: Select two of the following LATIN courses.

- LATIN 1300 - LATIN AUTHORS 1
- LATIN 1302 - LATIN AUTHORS 2
- LATIN 1400 - ADVANCED READINGS IN LATIN EPIC
- LATIN 1416 - ADVANCED READINGS IN LATIN HISTORIANS
- LATIN 1902 - DIRECTED STUDY FOR UNDERGRADS

Latin language track: Select two of the following GREEK courses.

- GREEK 0011 - BEGINNING ANCIENT GREEK 1
- GREEK 0021 - BEGINNING ANCIENT GREEK 2
- GREEK 0210 - INTERMEDIATE GREEK: PROSE
- GREEK 0220 - INTERMEDIATE GREEK: VERSE

Classics major general rules and requirements

Students have combined a major in classics with a second major or certificate such as: anthropology; biology; communication; history; history and philosophy of science; history of art and architecture; nonclassical languages and literatures; psychology; and gender, sexuality, and women's studies. Students planning graduate study in classics may be required to obtain reading competency in German, French, or Italian. Such study might begin during the course of completing the undergraduate major or may be undertaken in graduate school.

Rules and requirements

- The Classics major requires a minimum of 30 credits, distributed as directed by the chosen track.
- Students must have an overall 2.00 GPA in courses counting toward the major.
- No more than two courses in the Greek or Latin language tracks may be taken with the S/NC grade option. No more than four courses in Classical Civilization track may be taken with the S/NC grade option.
- Credit by examination is generally not granted, except for placement in the language sequences. The department will consider students with special circumstances.
- Students may either enroll in one of the W courses offered by the department or arrange with the instructor of an upper-level course for the addition of one credit of writing practicum.
- Majors who have reached the end of the junior year with a GPA in departmental courses of 3.50 or higher may, in conjunction with a senior-level course, write an honors essay. Acceptance of the essay by the department will qualify the student for graduating with departmental honors in Classics.

Minor

Ancient Greek Minor

Students pursuing this minor must complete at least 15 credits of coursework as follows.

Language courses

Students must complete following courses.

- GREEK 0011 - BEGINNING ANCIENT GREEK 1
- GREEK 0021 - BEGINNING ANCIENT GREEK 2
- GREEK 0210 - INTERMEDIATE GREEK: PROSE
- GREEK 0220 - INTERMEDIATE GREEK: VERSE

Advanced course

After completing the intermediate course sequence, students must select one of the following courses.

- GREEK 1300 - GREEK AUTHORS 1
- GREEK 1301 - GREEK AUTHORS 1-WRITING PRACTICUM
- GREEK 1302 - GREEK AUTHORS 2
- GREEK 1303 - GREEK AUTHORS 2-WRITING PRACTICUM
- GREEK 1400 - ADVANCED READINGS IN GREEK EPIC
- GREEK 1402 - ADVANCED READINGS IN GREEK TRAGEDY
- GREEK 1416 - ADVANCED READINGS IN GREEK HISTORIANS
- GREEK 1420 - ADVANCED READINGS IN GREEK PHILOSOPHY
- GREEK 1700 - GREEK PROSE COMPOSITION

Classical Civilization Minor

Students must complete at least 15 credits of coursework as follows.

Survey course in Greek civilization or history

One of the following courses.

- CLASS 0010 - GREEK CIVILIZATION
- CLASS 1210 - GREEK HISTORY
- HIST 1783 - GREEK HISTORY

Survey course in Roman civilization or history

One of the following courses.

- CLASS 0020 - ROMAN CIVILIZATION
- CLASS 1220 - ROMAN HISTORY
- HIST 1781 - ROMAN HISTORY

Literary or textual course

Any Classics, Greek, or Latin course with a literary or textual basis.

Electives

Any two courses in Classics, Greek, or Latin.

Classics Minor - Classical Civilization Track (minimal languages)

Effective Spring 2019 this program will no longer be active. Students currently enrolled in the Classics Minor will have the option to remain in the minor or declare one of the new minors (Ancient Greek, Latin or Classical Civilization). Students who choose to complete the Classics Minor must do so by Spring 2019.

Classics Minor Requirements

The department offers two types of minor tracks, one in classics (Greek and/or Latin), and one in classical civilization. The classics minor consists exclusively of courses in Greek and/or Latin. For the classical civilization minor, no language courses are required, although language courses may be counted if the student wishes.

For advice on alternative plans, please consult with the undergraduate advisor.

Classical Civilization Track (minimal languages)

Fifteen credits in classics, Greek, or Latin courses, including at least one survey course in Greek civilization or history (3 credits), one survey course in Roman civilization or history (3 credits), and one course with a literary or textual component (3 credits). Any Greek or Latin course may count toward the literary/textual requirement.

Classics Minor - Classics Track

Effective Spring 2019 this program will no longer be active. Students currently enrolled in the Classics Minor will have the option to remain in the minor or declare one of the new minors (Ancient Greek, Latin or Classical Civilization). Students who choose to complete the Classics Minor must do so by Spring 2019.

Classics Minor Requirements

The department offers two types of minor tracks, one in classics (Greek and/or Latin), and one in classical civilization. The classics minor consists exclusively of courses in Greek and/or Latin. For the classical civilization minor, no language courses are required, although language courses may be counted if the student wishes.

For advice on alternative plans, please consult with the undergraduate advisor.

Classics Track

- LATIN 0011 - BEGINNING LATIN 1
- LATIN 0021 - BEGINNING LATIN 2
- LATIN 0210 - INTERMEDIATE LATIN: PROSE
- LATIN 0220 - INTERMEDIATE LATIN: VERSE
  or
- GREEK 0011 - BEGINNING ANCIENT GREEK 1

- GREEK 0021 - BEGINNING ANCIENT GREEK 2
- GREEK 0210 - INTERMEDIATE GREEK: PROSE
- GREEK 0220 - INTERMEDIATE GREEK: VERSE

Latin Minor

Students pursuing this minor must complete at least 15 credits of coursework as follows.

Language courses

Students must complete the following courses.

- LATIN 0011 - BEGINNING LATIN 1
- LATIN 0021 - BEGINNING LATIN 2
- LATIN 0210 - INTERMEDIATE LATIN: PROSE
- LATIN 0220 - INTERMEDIATE LATIN: VERSE

Advanced course

After completing teh intermediate course sequence, students must select one of the following courses.

- LATIN 1300 - LATIN AUTHORS 1
- LATIN 1301 - LATIN AUTHORS 1: WRITING PRACTICUM
- LATIN 1302 - LATIN AUTHORS 2
- LATIN 1303 - LATIN AUTHORS 2: WRITING PRACTICUM
- LATIN 1400 - ADVANCED READINGS IN LATIN EPIC
- LATIN 1402 - ADV READINGS IN LATIN DRAMA
- LATIN 1406 - ADVANCED READINGS IN LATIN LYRIC
- LATIN 1416 - ADVANCED READINGS IN LATIN HISTORIANS
- LATIN 1420 - ADVANCED READINGS IN LATIN PHILOSOPHY
- LATIN 1430 - SPECIAL TOPICS IN LATIN LITERATURE

Mediterranean Art and Archaeology Minor

The minor in Mediterranean Art and Archaeology offers an attractive preparation for undergraduates who are interested in graduate and professional schools in Classics and Classical Studies, Mediterranean Archaeology, Art and Architectural History, Museum Studies, Cultural Heritage Management, and Antiquities Law. Additionally, it prepares them for careers in archaeological fieldwork, museums, international policymaking, and nonprofit and non-governmental organizations engaged in the preservation and management of world historic sites. The Mediterranean Art and Archaeology minor requires 15 credits for completion, detailed as follows.

Core course

- CLASS 0600 - INTRODUCTION TO MEDITERRANEAN ARCHAEOLOGY

Civilization and History Courses

Students must choose at least one of the following courses.

- CLASS 0010 - GREEK CIVILIZATION
- CLASS 0020 - ROMAN CIVILIZATION
- CLASS 1210 - GREEK HISTORY
- CLASS 1220 - ROMAN HISTORY

Art and Architecture courses

Students must choose at least two of the following courses.

- CLASS 0500 - ANCIENT ART or
- HAA 0150 - ANCIENT ART

- CLASS 1510 - GREEK ART or
- HAA 1110 - GREEK ART

- CLASS 1520 - ROMAN ART or
- HAA 1130 - ROMAN ART

- CLASS 1524 - ROMAN ARCHITECTURE or
- ARC 1152 - ROMAN ARCHITECTURE

- CLASS 1610 - GREEK ARCHAEOLOGY
- HAA 0105 - ART AND EMPIRE

Elective courses

Students must choose at least one of the following courses.

- ANTH 0534 - PREHISTORIC FOUNDATIONS OF EUROPEAN CIVILIZATION
- ANTH 0538 - THE ARCHEOLOGIST LOOKS AT DEATH
- ANTH 0630 - FORENSIC ANTHROPOLOGY: AN INTRODUCTION
- ANTH 1535 - BASIC ARCHEOLOGICAL FIELD TRAINING

- CLASS 0032 - ATHLETICS OF THE ANCIENT WORLD or
- HIST 1746 - ATHLETICS OF THE ANCIENT WORLD

- CLASS 0400 - ANCIENT EMPIRES or
- HAA 0160 - ANCIENT EMPIRES

- CLASS 0618 - DEATH IN THE ANCIENT WORLD or
- HAA 0018 - DEATH IN THE ANCIENT WORLD

- CLASS 0650 - ARCHAEOLOGY OF THE BODY
- CLASS 1630 - MARGINALITY IN THE ANCIENT GREEK WORLD
- CLASS 1650 - WARFARE: ANCIENT MEDITERRANEAN
- CLASS 1900 - INTERSHIP IN CLASSICS
- ARC 1183 - DIGITAL ROMAN AFRICA: VISUALIZING ARCHITECTURE AND URBANISM IN ROMAN NORTH AFRICA
- HAA 0165 - GODS AND KINGS: ART IN ANCIENT MESOPOTAMIA
- RELGST 1100 - ISRAEL IN THE BIBLICAL AGE

- RELGST 1160 - JERUSALEM: HISTORY AND IMAGINATION or
- HAA 1105 - JERUSALEM HISTORY AND IMAGINATION

- RELGST 1170 - ARCHAEOLOGY OF ISRAEL-PALESTINE

Department of Communication

The study of communication is one of the oldest but still most contemporary of disciplines. The field examines important questions about society, communication, and persuasion in a way that combines the best of the ancient liberal arts tradition with the critical attention to the newest media technologies. In courses such as persuasion, argument, interpersonal communication, political rhetoric, rhetoric of science, nonverbal communication, history of media, media criticism, and television and society, our faculty offer diverse views on the roles of communication, media, and rhetoric in our lives.

A degree in communication is not vocational in design, although many of the Department of Communication's graduates hold important positions in industry, education, the media, government, law, and various other professions. An understanding of communication as a human activity, as defined

above, makes the department's graduates attractive candidates when seeking employment or obtaining admission to graduate programs. For more information on the major or the Department of Communication, see www.comm.pitt.edu.

Major

Communication, BA

Major Requirements

The Communication: Rhetoric and Communication major requires the completion of 33 credits, detailed as follows. Courses that count toward the major must be completed with a letter grade of C or better.

Required courses

Communications majors must take all three of the following courses. These courses meet prerequisites for upper-level courses.

- COMMRC 0300 - COMMUNICATION PROCESS
- COMMRC 0310 - RHETORICAL PROCESS
- COMMRC 0320 - MASS COMMUNICATION PROCESS

Two skills courses

Students must take two skills courses from the following list. One of the courses must be COMMRC 0520 - PUBLIC SPEAKING.

- COMMRC 0500 - ARGUMENT
- COMMRC 0510 - DEBATE
- COMMRC 0520 - PUBLIC SPEAKING (Required)
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- COMMRC 0540 - DISCUSSION
- COMMRC 0550 - SPEECH COMPOSITION
- COMMRC 0575 - INTRODUCTION TO RADIO PRODUCTION

Six upper-level courses

These courses focus on specific topics or contexts of communication. Students in these courses will conduct substantive research and do significant writing; therefore, the completion of the composition requirement is a prerequisite.

- COMMRC 1101 - EVIDENCE
- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION
- COMMRC 1103 - RHETORIC AND CULTURE
- COMMRC 1104 - POLITICAL COMMUNICATION
- COMMRC 1105 - TELEVISION AND SOCIETY
- COMMRC 1106 - SMALL GROUP COMMUNICATION
- COMMRC 1109 - NONVERBAL COMMUNICATION
- COMMRC 1110 - THEORIES OF INTERPERSONAL COMMUNICATION
- COMMRC 1111 - THEORIES OF PERSUASION
- COMMRC 1112 - THEORIES OF RHETORIC
- COMMRC 1114 - FREEDOM OF SPEECH AND PRESS
- COMMRC 1115 - AFRICAN AMERICAN RHETORIC
- COMMRC 1116 - RHETORIC OF THE AMERICAN COUNTERCULTURE
- COMMRC 1117 - 21ST CENTURY PUBLIC ARGUMENT
- COMMRC 1119 - PRESIDENTIAL RHETORIC 2
- COMMRC 1120 - RHETORIC OF COLD WAR
- COMMRC 1121 - HISTORY OF MASS MEDIA
- COMMRC 1122 - MEDIA CRITICISM

- COMMRC 1123 - RHETORICAL CRITICISM
- COMMRC 1125 - MEDIA THEORY
- COMMRC 1126 - MEDIA AND CONSUMER CULTURE
- COMMRC 1143 - KNOWLEDGE, POWER, AND DESIRE
- COMMRC 1147 - THE RHETORIC OF SCIENCE
- COMMRC 1148 - RHETORIC AND HUMAN RIGHTS
- COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION
- COMMRC 1731 - SPECIAL TOPICS IN RHETORIC
- COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION
- LING 1000 - INTRODUCTION TO LINGUISTICS
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- CSD 1020 - NATURE OF LANGUAGE * This course is offered by the School of Health and Rehabilitation Science

Notes

The Department of Communication offers three special project courses, which are not required.

- COMMRC 1710 - SENIOR THESIS IN COMMUNICATION requires a GPA of 3.00 for enrollment and can be counted toward the major.
- COMMRC 1900 - COMMUNICATION INTERNSHIP requires a GPA of 2.75; this course cannot be counted toward the major.
- COMMRC 1901 - INDEPENDENT STUDY requires a GPA of 3.00; this course cannot be counted toward the major.

Students who plan to do graduate work in communication are advised to do additional work in a second language.

Department of East Asian Languages and Literatures

The Department of East Asian Languages and Literatures offers courses in the language, literature, film, linguistics, and culture of China, Japan, and Korea. An undergraduate major is available in either Chinese or Japanese. There is a multiyear sequence of courses in the modern standard languages of China, Japan, and Korea, plus a wide variety of offerings (ranging from introductory to specialized) designed to illuminate various facets of these Asian civilizations. Students whose interests range broadly across the civilization of East Asia may alternatively develop an interdisciplinary studies major or take advantage of the Asian Studies Certificate program. The departmental curriculum is composed of three main categories:

- courses designed to develop competence in the four skills (speaking, listening, reading, writing) of the Chinese, Japanese, or Korean language, plus courses for advanced study in Chinese and Japanese;
- courses taught in English and focused on the mainstream of Chinese, Japanese, and Korean culture as reflected in literature, drama, and film; and
- courses for the advanced study of literature and linguistic analysis.

For more information on the Chinese and Japanese majors, courses in Korean language, or on the Department of East Asian Languages and Literatures, visit the Web site www.deall.pitt.edu/.

Major

Chinese, BA

Chinese and Japanese major requirements

Chinese or Japanese majors may take first-year language courses on an Satisfactory/No Credit (S/NC) basis. Second-year language courses must be taken on a letter grade basis. In the third and fourth years, majors have the option of taking two additional courses S/NC, one of which may be an advanced language course.

Course Requirements

The Chinese major requires 55 credits for completion.

Language

All of the following first, second, and third year language courses are required.

- CHIN 0001 - FIRST YEAR CHINESE 1
- CHIN 0002 - FIRST YEAR CHINESE 2
- CHIN 0003 - SECOND YEAR CHINESE 1
- CHIN 0004 - SECOND YEAR CHINESE 2
- CHIN 1020 - THIRD YEAR CHINESE 1
- CHIN 1021 - THIRD YEAR CHINESE 2

Advanced language courses

Choose one of the following advanced language courses.

- CHIN 1040 - LITERARY CHINESE 1 CLASSICAL
- CHIN 1050 - FOURTH YEAR CHINESE 1
- CHIN 1051 - FOURTH YEAR CHINESE 2

Literature, linguistics, culture, and film

Choose one of the following traditional period courses

- CHIN 1041 - LITERARY CHINESE 2 CLASSICAL
- CHIN 1047 - CHINESE AND WESTERN POETRY
- CHIN 1083 - MASTERPIECES OF CHINESE LITERATURE: PREMODERN
- CHIN 1090 - GREAT MINDS OF CHINA

Choose one of the following modern period courses

- CHIN 0085 - REVOLUTION, INVOLUTION, AND IDENTITY IN MODERN CHINESE CULTURE
- CHIN 1025 - ASPECTS OF THE CHINESE LANGUAGE
- CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM
- CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN
- CHIN 1088 - NEW CHINESE CINEMA

Choose two of the following courses

- CHIN 0007 - INTRODUCTION TO CHINESE CIVILIZATION AND CULTURE
- CHIN 0081 - EAST ASIA IN THE WORLD *
- CHIN 0085 - REVOLUTION, INVOLUTION, AND IDENTITY IN MODERN CHINESE CULTURE *
- CHIN 1025 - ASPECTS OF THE CHINESE LANGUAGE
- CHIN 1027 - TOPICS ON CHINESE AS A SECOND LANGUAGE
- CHIN 1041 - LITERARY CHINESE 2 CLASSICAL
- CHIN 1047 - CHINESE AND WESTERN POETRY *
- CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM *
- CHIN 1083 - MASTERPIECES OF CHINESE LITERATURE: PREMODERN *
- CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN *
- CHIN 1088 - NEW CHINESE CINEMA *
- CHIN 1090 - GREAT MINDS OF CHINA *
- CHIN 1700 - TRANSLATION THEORY AND PRACTICE

Writing-intensive course

Students must complete the 1-credit CHIN 1908 - DIRECTED WRITING FOR MAJORS in conjunction with a course from the **Literature, linguistics, culture, and film** requirement. Eligible courses are indicated with an asterisk (*).

Senior Project

CHIN 1999 - SENIOR PROJECT should be completed in the student's final academic term.

Non-departmental course requirements

Choose two courses with at least 50% China-related content and offered by a department other than East Asian Languages and Literatures. A sample list of courses follows.

- ECON 1630 - ECONOMIC DEVELOPMENT OF CHINA
- HAA 0620 - ART OF CHINA
- HAA 1640 - 20TH CENTURY CHINESE ART
- HIST 0401 - MODERN EAST ASIAN CIVILIZATION
- HIST 0755 - RELIGION IN ASIA
- HIST 1422 - LATE IMPERIAL CHINA
- PS 1523 - EAST ASIA IN WORLD POLITICS
- RELGST 0505 - RELIGION IN ASIA

Japanese, BA

Chinese and Japanese major requirements

Chinese or Japanese majors may take first-year language courses on an Satisfactory/No Credit (S/NC) basis. Second-year language courses must be taken on a letter grade basis. In the third and fourth years, majors have the option of taking two additional courses S/NC, one of which may be an advanced language course.

Requirements

The Japanese major requires completion of 54 credits and a minimum GPA of 2.0 in departmental courses. This program includes elements from four categories: courses designed to develop competence in the four skills of the Japanese language; courses taught in English and focused on the mainstream of Japanese culture as reflected in literature, drama, film, and linguistics; courses related to Japan offered in other departments of the Dietrich School; and a capstone experience for graduating seniors.

Language

- JPNSE 0001 - FIRST YEAR JAPANESE 1
- JPNSE 0002 - FIRST YEAR JAPANESE 2
- JPNSE 0003 - SECOND YEAR JAPANESE 1
- JPNSE 0004 - SECOND YEAR JAPANESE 2
- JPNSE 1020 - THIRD YEAR JAPANESE 1
- JPNSE 1021 - THIRD YEAR JAPANESE 2

Advanced courses

- JPNSE 1040 - INTRODUCTION TO CLASSICAL JAPANESE 1
- JPNSE 1050 - FOURTH YEAR JAPANESE 1

Culture, Literature, and Linguistics

Complete the following course.

- JPNSE 0083 - INTRODUCTION TO JAPANESE LITERATURE *

Choose one of the following courses.

- JPNSE 1023 - ASPECTS OF THE JAPANESE LANGUAGE

- JPNSE 1035 - PRAGMATICS OF JAPANESE *

Choose two of the following elective courses.

- JPNSE 0007 - JAPANESE CULTURE AND CIVILIZATION
- JPNSE 0081 - EAST ASIA IN THE WORLD
- JPNSE 0085 - JAPANESE TALES OF THE SUPERNATURAL *
- JPNSE 1057 - JAPANESE CULTURE AND SOCIETY THROUGH CINEMA *
- JPNSE 1058 - WESTERNS AND SAMURAI FILMS *
- JPNSE 1070 - WORLD OF JAPAN *
- JPNSE 1071 - THE WORLD OF JAPAN *
- JPNSE 1080 - GHOSTS, MASKS AND ACTORS *
- JPNSE 1081 - FORMS OF JAPANESE THEATRE *
- JPNSE 1700 - INTRODUCTION TO THEORY AND PRACTICE OF TRANSLATION

Related Field

Three Japan-related courses offered by departments in the Dietrich School of Arts and Sciences.

Capstone

- JPNSE 1999 - CAPSTONE PROJECT must be taken during the student's last spring term as an undergraduate.

Writing course

Japanese majors must complete JPNSE 1908 - DIRECTED WRITING FOR MAJORS in conjunction with one of the courses marked with an asterisk (*) in the culture, literature, and linguistics section.

Minor

Chinese Minor - Option A

Chinese language courses

- CHIN 0001 - FIRST YEAR CHINESE 1
- CHIN 0002 - FIRST YEAR CHINESE 2
- CHIN 0003 - SECOND YEAR CHINESE 1
- CHIN 0004 - SECOND YEAR CHINESE 2

Chinese literature or culture course

Choose one course from the following list.

- CHIN 0007 - INTRODUCTION TO CHINESE CIVILIZATION AND CULTURE
- CHIN 0080 - CITY LIFE AND EAST ASIAN CULTURE
- CHIN 0081 - EAST ASIA IN THE WORLD
- CHIN 0085 - REVOLUTION, INVOLUTION, AND IDENTITY IN MODERN CHINESE CULTURE
- CHIN 1025 - ASPECTS OF THE CHINESE LANGUAGE
- CHIN 1041 - LITERARY CHINESE 2 CLASSICAL
- CHIN 1047 - CHINESE AND WESTERN POETRY
- CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM
- CHIN 1083 - MASTERPIECES OF CHINESE LITERATURE: PREMODERN
- CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN

- CHIN 1088 - NEW CHINESE CINEMA
- CHIN 1089 - THE WORLD OF CHINA
- CHIN 1090 - GREAT MINDS OF CHINA

Chinese Minor - Option B

Chinese language courses

- CHIN 0001 - FIRST YEAR CHINESE 1
- CHIN 0002 - FIRST YEAR CHINESE 2

Chinese literature course

Choose one course from the following list.

- CHIN 1040 - LITERARY CHINESE 1 CLASSICAL
- CHIN 1041 - LITERARY CHINESE 2 CLASSICAL
- CHIN 1047 - CHINESE AND WESTERN POETRY
- CHIN 1083 - MASTERPIECES OF CHINESE LITERATURE: PREMODERN
- CHIN 1090 - GREAT MINDS OF CHINA

Chinese culture courses

Choose two courses from the following list.

- CHIN 0007 - INTRODUCTION TO CHINESE CIVILIZATION AND CULTURE
- CHIN 0080 - CITY LIFE AND EAST ASIAN CULTURE
- CHIN 0081 - EAST ASIA IN THE WORLD
- CHIN 0085 - REVOLUTION, INVOLUTION, AND IDENTITY IN MODERN CHINESE CULTURE
- CHIN 1025 - ASPECTS OF THE CHINESE LANGUAGE
- CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM
- CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN
- CHIN 1088 - NEW CHINESE CINEMA
- CHIN 1089 - THE WORLD OF CHINA

Chinese Minor - Option C

Chinese courses

Choose four courses from the following list.

- CHIN 0007 - INTRODUCTION TO CHINESE CIVILIZATION AND CULTURE
- CHIN 0080 - CITY LIFE AND EAST ASIAN CULTURE
- CHIN 0081 - EAST ASIA IN THE WORLD
- CHIN 0085 - REVOLUTION, INVOLUTION, AND IDENTITY IN MODERN CHINESE CULTURE
- CHIN 1025 - ASPECTS OF THE CHINESE LANGUAGE
- CHIN 1040 - LITERARY CHINESE 1 CLASSICAL
- CHIN 1041 - LITERARY CHINESE 2 CLASSICAL
- CHIN 1047 - CHINESE AND WESTERN POETRY
- CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM
- CHIN 1083 - MASTERPIECES OF CHINESE LITERATURE: PREMODERN
- CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN
- CHIN 1088 - NEW CHINESE CINEMA
- CHIN 1089 - THE WORLD OF CHINA

- CHIN 1090 - GREAT MINDS OF CHINA

Chinese-focused courses in other departments

Choose two courses from the following list.

- ECON 1630 - ECONOMIC DEVELOPMENT OF CHINA
- HAA 0620 - ART OF CHINA
- HAA 1640 - 20TH CENTURY CHINESE ART
- HIST 0401 - MODERN EAST ASIAN CIVILIZATION

- HIST 0755 - RELIGION IN ASIA or
- RELGST 0505 - RELIGION IN ASIA

- HIST 1422 - LATE IMPERIAL CHINA
  Other course(s) with at least 50% China-related content, offered by a department other than East Asian Languages and Literatures.
- PS 1523 - EAST ASIA IN WORLD POLITICS

Japanese Minor - Japanese Culture Option

Japanese Minor

Two options are available.

Japanese culture option (15 credits)

Five 3-credit courses from the following list.

- JPNSE 0007 - JAPANESE CULTURE AND CIVILIZATION
- JPNSE 0080 - CITY LIFE AND EAST ASIAN CULTURE
- JPNSE 0081 - EAST ASIA IN THE WORLD
- JPNSE 0083 - INTRODUCTION TO JAPANESE LITERATURE
- JPNSE 0085 - JAPANESE TALES OF THE SUPERNATURAL
- JPNSE 1023 - ASPECTS OF THE JAPANESE LANGUAGE
- JPNSE 1035 - PRAGMATICS OF JAPANESE
- JPNSE 1056 - JAPANESE LITERATURE AND THE WEST
- JPNSE 1057 - JAPANESE CULTURE AND SOCIETY THROUGH CINEMA
- JPNSE 1058 - WESTERNS AND SAMURAI FILMS
- JPNSE 1059 - JAPANESE LITERATURE ON SCREEN
- JPNSE 1070 - WORLD OF JAPAN
- JPNSE 1071 - THE WORLD OF JAPAN
- JPNSE 1080 - GHOSTS, MASKS AND ACTORS
- JPNSE 1081 - FORMS OF JAPANESE THEATRE
- JPNSE 1700 - INTRODUCTION TO THEORY AND PRACTICE OF TRANSLATION

Japanese Minor - Japanese Language and Culture Option

Japanese Minor

Two options are available.

Japanese language and culture option (19 credits)

- JPNSE 0001 - FIRST YEAR JAPANESE 1
- JPNSE 0002 - FIRST YEAR JAPANESE 2

Three 3-credit courses from the following list.

- JPNSE 0080 - CITY LIFE AND EAST ASIAN CULTURE
- JPNSE 0081 - EAST ASIA IN THE WORLD
- JPNSE 0083 - INTRODUCTION TO JAPANESE LITERATURE
- JPNSE 0085 - JAPANESE TALES OF THE SUPERNATURAL
- JPNSE 1023 - ASPECTS OF THE JAPANESE LANGUAGE
- JPNSE 1035 - PRAGMATICS OF JAPANESE
- JPNSE 1056 - JAPANESE LITERATURE AND THE WEST
- JPNSE 1057 - JAPANESE CULTURE AND SOCIETY THROUGH CINEMA
- JPNSE 1058 - WESTERNS AND SAMURAI FILMS
- JPNSE 1059 - JAPANESE LITERATURE ON SCREEN
- JPNSE 1070 - WORLD OF JAPAN
- JPNSE 1071 - THE WORLD OF JAPAN
- JPNSE 1080 - GHOSTS, MASKS AND ACTORS
- JPNSE 1081 - FORMS OF JAPANESE THEATRE
- JPNSE 1700 - INTRODUCTION TO THEORY AND PRACTICE OF TRANSLATION

Japanese Minor - Japanese Language Option

This option in the Japanese minor requires 23 credits for completion.

Required language courses

- JPNSE 0001 - FIRST YEAR JAPANESE 1
- JPNSE 0002 - FIRST YEAR JAPANESE 2
- JPNSE 0003 - SECOND YEAR JAPANESE 1
- JPNSE 0004 - SECOND YEAR JAPANESE 2

Additional Japanese course

Students must take another JPNSE course, taught in English and listed as a culture, film, linguistics, literature, or theatre course.

Korean Minor - Korean for Heritage Learners Option

Korean Minor

Two options are available.

Option 2: Korean for Heritage Learners (14 credits)

Two four-credit Korean language courses from the following list.

- KOREAN 0003 - SECOND YEAR KOREAN 1
- KOREAN 0004 - SECOND YEAR KOREAN 2
- KOREAN 0005 - THIRD YEAR KOREAN 1
- KOREAN 0006 - THIRD YEAR KOREAN 2
- KOREAN 1050 - FOURTH YEAR KOREAN
- KOREAN 1051 - FOURTH YEAR KOREAN 2

Two three-credit course from the following list

- KOREAN 0007 - INTRODUCTION TO KOREAN CULTURE AND CIVILIZATION
- KOREAN 0070 - WORLD OF KOREA: PAST AND PRESENT
- KOREAN 0075 - INTRODUCTION TO KOREA THROUGH FILMS
- KOREAN 0084 - INTRODUCTION TO MODERN KOREAN LITERATURE
- KOREAN 1023 - ASPECTS OF THE KOREAN LANGUAGE
- KOREAN 1060 - LANGUAGE AND SOCIETY IN KOREA

Korean Minor - Korean Option

Korean Minor

Two options are available.

Option 1: Korean (19 credits)

Four four-credit Korean language courses from the following list.

- KOREAN 0001 - FIRST YEAR KOREAN 1
- KOREAN 0002 - FIRST YEAR KOREAN 2
- KOREAN 0003 - SECOND YEAR KOREAN 1
- KOREAN 0004 - SECOND YEAR KOREAN 2
- KOREAN 0005 - THIRD YEAR KOREAN 1
- KOREAN 0006 - THIRD YEAR KOREAN 2
- KOREAN 1050 - FOURTH YEAR KOREAN
- KOREAN 1051 - FOURTH YEAR KOREAN 2

One three-credit course from the following list

- KOREAN 0007 - INTRODUCTION TO KOREAN CULTURE AND CIVILIZATION
- KOREAN 0070 - WORLD OF KOREA: PAST AND PRESENT
- KOREAN 0075 - INTRODUCTION TO KOREA THROUGH FILMS
- KOREAN 0084 - INTRODUCTION TO MODERN KOREAN LITERATURE
- KOREAN 1023 - ASPECTS OF THE KOREAN LANGUAGE
- KOREAN 1060 - LANGUAGE AND SOCIETY IN KOREA

Department of Economics

A major in economics can be designed to serve a variety of purposes in the general liberal arts and can provide a background for postgraduate study in a number of professional schools. In addition, economics is frequently taken as a dual major with business at the undergraduate level. Among the graduate-level options which can be pursued by economics majors are law, business, professional-level training in economics, public administration, professional health management, hospital administration, urban affairs, and transportation studies. Because the range of interests among economics majors is quite broad, students are encouraged to work out a plan of studies fitting their individual needs with a departmental advisor. For more information on the major, the minor, and the Department of Economics, see www.econ.pitt.edu.

Major

Economics, BA

Economics Major Requirements

Majors may earn either a Bachelor of Science or a Bachelor of Arts in economics. The general rules and requirements as they apply to both degrees are as follows:

- A minimum overall 2.00 GPA is required in all economics courses for graduation with an economics major.
- A minimum grade of C is required in ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY, ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY, ECON 1100 - INTERMEDIATE MICROECONOMICS, ECON 1110 - INTERMEDIATE MACROECONOMICS, MATH 0120 and MATH 0220.
- No ECON course that counts toward the major may be taken on an S/NC basis.
- Students must complete at least one writing-intensive (W) course in the major.
- Credit by exam is usually not accepted, but students should check with the departmental advisor about the possibility.
- Majors may choose to complete a double major. Frequently chosen double majors include economics with computer science, history, and philosophy. Less frequently chosen are the sciences (notably biology), which could lead to graduate-level options in public health fields. Interested students have the option of completing a joint major with the mathematics department that will prepare students for a quantitatively oriented job in industry or for entering graduate school in applied mathematics, statistics, economics, business, or a related field (see mathematics major). A structured program leading to a joint Dietrich School /business major is available for students interested in combining economics with business (see Nondepartmental Dietrich School Majors for details).
- ECON 0800 - INTRODUCTION TO ECONOMICS is designed for non-majors are therefore do not count toward the major.
- Internship credits do not count toward the major. Students are encouraged to do internships.
- Only three credits of ECON 1901 through ECON 1903 may be applied toward the credits required for the major.
- Honors in economics is granted if, in addition to fulfilling all requirements for the economics major, the student meets the following criteria:
    - Maintenance of a GPA of 3.5 in all economics courses
    - Maintenance of an overall GPA of 3.5 or better
    - Completion of at least 3 credits in the economics proseminar series (ECON 1700-ECON 1730)

Requirements

Students seeking a BA in economics must earn at least 27 credits in economics courses including the following:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- ECON 1100 - INTERMEDIATE MICROECONOMICS
- ECON 1110 - INTERMEDIATE MACROECONOMICS
- Two Economics elective courses*
- Two ECON 1000-level elective courses which require ECON 1100 or ECON 1110 as prerequisites
- One ECON 1000-level elective course
- ECON 0900 - PROFESSIONAL DEVELOPMENT FOR ECONOMISTS

ECON 0800

* ECON 0800 does not count as an ECON elective course.

Students seeking the BA must also take the following corequisite courses

One of the following

- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

One of the following

- STAT 0200 - BASIC APPLIED STATISTICS
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT *

Note:

* STAT 1000 or STAT 1100 is required for students pursuing the Economics/Business Dual major. Students pursuing this major are exempted from taking BUSECN 1010 since its equivalent is ECON 1100.

Economics, BS

Economics Major Requirements

Majors may earn either a Bachelor of Science or a Bachelor of Arts in economics. The general rules and requirements as they apply to both degrees are as follows:

- A minimum overall 2.00 GPA is required in all economics courses for graduation with an economics major.
- A minimum grade of C is required in ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY, ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY, ECON 1100 - INTERMEDIATE MICROECONOMICS, ECON 1110 - INTERMEDIATE MACROECONOMICS, MATH 0120 and MATH 0220.
- No ECON course that counts toward the major may be taken on an S/NC basis.
- Students must complete at least one writing-intensive (W) course in the major.
- Credit by exam is usually not accepted, but students should check with the departmental advisor about the possibility.
- Majors may choose to complete a double major. Frequently chosen double majors include economics with computer science, history, and philosophy. Less frequently chosen are the sciences (notably biology), which could lead to graduate-level options in public health fields. Interested students have the option of completing a joint major with the mathematics department that will prepare students for a quantitatively oriented job in industry or for entering graduate school in applied mathematics, statistics, economics, business, or a related field (see mathematics major). A structured program leading to a joint Dietrich School /business major is available for students interested in combining economics with business (see Nondepartmental Dietrich School Majors for details).
- ECON 0800 - INTRODUCTION TO ECONOMICS is designed for non-majors are therefore do not count toward the major.
- Internship credits do not count toward the major. Students are encouraged to do internships.
- Only three credits of ECON 1901 through ECON 1903 may be applied toward the credits required for the major.
- Honors in economics is granted if, in addition to fulfilling all requirements for the economics major, the student meets the following criteria:
    - Maintenance of a GPA of 3.5 in all economics courses
    - Maintenance of an overall GPA of 3.5 or better
    - Completion of at least 3 credits in the economics proseminar series (ECON 1700-ECON 1730)

Requirements

Students seeking a BS in economics must earn at least 24 credits in economics courses including the following:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 1100 - INTERMEDIATE MICROECONOMICS
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- ECON 1110 - INTERMEDIATE MACROECONOMICS
- Two economics elective courses
- Two ECON 1000-level courses that require ECON 1100 or ECON 1110 or their equivalents as prerequisites
- ECON 0900 - PROFESSIONAL DEVELOPMENT FOR ECONOMISTS

One of the following

- ECON 1150 - APPLIED ECONOMETRICS 1
- ECON 1180 - MATHEMATICAL ECONOMICS

Note:

*ECON 0800 does not count was an ECON elective course

Students seeking the BS must also take the following corequisite courses:

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

One of the following

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- STAT 1000 - APPLIED STATISTICAL METHODS

Minor

Economics Minor

Requirements

The set of courses required for the minor in economics provides an introduction to the core theory in economics and explores some of the issues that economists study. The four core theory courses are taught each term, along with a broad range of applied economics courses. The required courses (totaling 15 credits) are as follows:

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

- ECON 1100 - INTERMEDIATE MICROECONOMICS or
- ECON 1110 - INTERMEDIATE MACROECONOMICS

- Two additional ECON courses

Note:

Courses in the 0800 series do not count toward the 15 credits required for the minor in economics, and only 3 credits of ECON 1901 - ECON 1903, directed studies, may be applied toward minor requirements. Other than these restrictions, the two additional courses mentioned above may be any of the courses offered by the department.

Joint Major

Economics-Statistics, BS

The economics-statistics joint major is intended for students who are interested in economics and enjoy modeling and analyzing data. Although the number of such students is not large, there are usually a few each year who express an interest in pursuing both economics and statistics in a depth suitable for a major. More often than not, these students are prime candidates for graduate school, and want to keep their options open as to which field to enter later. Short of completing two bachelor's degrees, their only option now is to major in one subject and minor in the other. If they later decide to attend graduate school in their minor subject, they are likely to be less competitive for admission to the best departments than if they had majored in that subject.

A joint major provides a useful compromise to keep their options open. Additionally, a joint major in economics and statistics can be an excellent training ground for the more quantitative areas of business (such as forecasting, investment management, actuarial planning, and accounting), health management, and public health, without losing the breadth provided by a liberal arts program. Graduates of the joint major who are interested in these areas will have the requisite skills for further training or for immediate entrance into the job market. The curriculum for the joint major consists of eight economics courses and eight statistics courses, along with a statistics writing practicum and three mathematics courses, for a total of 62 credits.

Course Requirements

Economics courses

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

- ECON 1100 - INTERMEDIATE MICROECONOMICS
- ECON 1110 - INTERMEDIATE MACROECONOMICS
- ECON 1150 - APPLIED ECONOMETRICS 1
- ECON 1200 - GAME THEORY
- One Economics elective course
- Two ECON 1000-level courses

Note

Courses in the ECON 0800 series do not count as ECON elective courses.

The Department of Economics recommends that students take the 1-credit ECON 0900 - PROFESSIONAL DEVELOPMENT FOR ECONOMISTS.

Statistics courses

- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS
- STAT 1221 - APPLIED REGRESSION
- STAT 1223 - APPLIED REGRESSION WRITING COMPONENT
- Four elective STAT courses, chosen from the 1200 level or above: one of these electives must be from the 1600 level or above, excluding internships and directed study courses.

Note

Students who plan to study statistics at the graduate level are encouraged to take STAT 1631 - INTERMEDIATE PROBABILITY and STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL.

Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

One of the following

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or
- MATH 0235 - HONORS 1 - VARIABLE CALCULUS

Note

Students are strongly encouraged to take a course in linear algebra, such as MATH 0280 - INTRO TO MATRICES & LINEAR ALG **or** MATH 1180 - LINEAR ALGEBRA 1 **or** MATH 1185 - HONORS LINEAR ALGEBRA

Additional Requirements

Grade requirements: A grade of C or better is required in each course that counts toward the major. A minimum GPA of 2.0 in departmental courses is required for graduation.

Satisfactory/No Credit option: No course required for the major may be taken on an S/NC basis.

Writing (W) requirement: Students must complete at least one W-course in the major. STAT 1223 fulfills this requirement.

Honors major requirements: Honors in the Economics-Statistics joint major is granted if the student maintains a GPA of 3.5 or above in all required courses and completes STAT 1631 - INTERMEDIATE PROBABILITY and STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL.

Department of English

The Department of English at the University of Pittsburgh offers two different major programs, English literature and English writing. Both majors are responsive to many of the traditional goals of a liberal arts education: they seek to develop a broad critical and historical understanding of influential cultural traditions and to foster a range of reading and writing strategies as well as skills of critical analysis. The majors prepare students fairly directly for careers in teaching or writing. But the skills and knowledge the majors impart are useful in numerous business and professional settings. For example, an English major is highly regarded as a pre-professional major for further training in law, medicine, or business. The director of academic affairs for the Association of American Medical Colleges has said (1986) that English majors have a higher rate of acceptance at medical schools than students who have majored in the biological and physical sciences.

Major

English Literature, BA

The English literature major is designed to develop a critical understanding of literary and cultural traditions in English that is at once informed, skeptical, and appreciative. Some of the distinctive features of the literature curriculum at the University of Pittsburgh are the recurrent concerns from the introductory to the most advanced undergraduate courses with the following: questions of how and why we read and write and participate in cultural activities; the contexts in which a range of literary texts and films are produced, understood, evaluated, and used; and the changing role of art and culture in the contemporary world. The major offers students opportunities to study canonical works of British and American literature from medieval times to the present; often, these texts will be studied in conjunction with historical or philosophical works, with other national literatures in English, and/or with films or works of popular culture. In many courses, students' own writing will be an important object of study.

Major Requirements

The English literature major requires the completion of 36 credits distributed as follows.

- ENGLIT 0505 - HOW TO DO THINGS WITH LITERATURE 1
- ENGLIT 0506 - LITERARY FIELD STUDIES

Two period courses chosen from a listing of approved courses

www.englishlit.pitt.edu/undergraduate/major-requirements

Advanced courses

- ENGLIT 1900 - PROJECT SEMINAR
- ENGLIT 1910 - SENIOR SEMINAR

Six elective courses

- At least four of these courses should fall within the designated area of concentration selected by the student. Students may apply for special approval with the director of the Literature program to count an elective not previously listed in a given area of concentration.
- At least three of these courses must be from the 1000-level or above.
- Students may take up to two courses from other programs in the Department of English (Composition, Film, Writing) designated within their area of concentration. Students may apply for special approval with the director of the Literature program to count an additional elective from another English program.
- At least one of these courses should also fulfill a breadth of study requirement. Students should ask instructors or advisors whether a particular course or section fulfills this requirement.
- Independent study, directed study, teaching assistantships, and internships may count toward any concentration depending upon the nature of the student's work.

Additional information and requirements

- There is no limit on the number of courses English majors may take on an S/NC basis, either inside or outside the department.

- English majors automatically fulfill Dietrich School requirements for W courses.
- Students who contemplate graduate study in English should remember that many schools do require second language competence, sometimes in more than one language.
- The English department confers honors on those graduates who maintain a 3.25 overall GPA with a GPA of 3.50 or better in English departmental courses. The GPA is based on all English department courses, not just those that fulfill major requirements.

English Writing - Fiction Track, BA

English Writing Intro

The University of Pittsburgh's Writing Program is the oldest and one of the largest in the United States, offering tracks in fiction, poetry, nonfiction, and journalism. There is a wide variety of classes, and the maximum size is 22. The Writing Program has a full-time faculty of widely published writers, several visiting writers each year, and a number of part-time faculty who are senior reporters or editors at Pittsburgh newspapers and magazines. Graduates of the writing program include editors at major daily newspapers and publishing houses and winners of the Pulitzer Prize and other major awards.

For more information on the Department of English and the majors in English literature and in English writing, see www.english.pitt.edu.

Major Requirements

A minimum of 33 credits is required: 21 credits in English writing courses and 12 in English literature courses.

Majors must choose one of three tracks: fiction, poetry, and nonfiction. In most cases, students will take other writing courses as well. Each track consists of three levels of courses. The introductory courses (0500s) offer a broad introduction to the skills required of writers in a particular area and generally should be taken no later than the first term of the junior year. The intermediate courses (1000s for fiction, 1200s for poetry, 1300s for nonfiction) refine and develop those skills. The senior seminars (1700s) provide a capstone experience for the student writer. Students should check prerequisites carefully before registration.

Students must complete one of the following prerequisite courses before declaring the major.

- ENGCMP 0200 - SEMINAR IN COMPOSITION
- ENGCMP 0203 - SEMINAR IN COMPOSITION: GENDER STUDIES
- ENGCMP 0205 - SEMINAR IN COMPOSITION: FILM
- ENGCMP 0207 - SEMINAR IN COMPOSITION: EDUCATION
- ENGCMP 0208 - SEMINAR IN COMPOSITION: SERVICE-LEARNING
- ENGCMP 0210 - SEMINAR IN COMPOSITION: ENGINEERING
- ENGCMP 0212 - SEMINAR IN COMPOSITION: TOPICS IN DIVERSITY
- FP 0003 - FIRST-YEAR SEMINAR
- FP 0006 - FIRST-YEAR SEMINAR

Fiction Track

- ENGWRT 0520 - INTRODUCTION TO FICTION WRITING
- ENGWRT 1010 - INTERMEDIATE FICTION
- ENGWRT 1094 - READINGS IN CONTEMPORARY FICTION
- ENGWRT 1710 - SENIOR SEMINAR IN FICTION
- Three ENGWRT elective courses*
- ENGLIT 0325 - THE SHORT STORY
- Two ENGLIT elective courses from the list below
- One ENGLIT elective course at the 1000-level from the list below

English Writing elective course info

Elective courses may be taken in another track if the student wishes.

English Literature approved courses

- ENGLIT 0500 - INTRODUCTION TO CRITICAL READING
- ENGLIT 0505 - HOW TO DO THINGS WITH LITERATURE 1
- ENGLIT 0560 - CHILDREN AND CULTURE
- ENGLIT 0562 - CHILDHOOD'S BOOKS
- ENGLIT 0570 - AMERICAN LITERATURE
- ENGLIT 0573 - LITERATURE OF THE AMERICAS
- ENGLIT 0580 - INTRODUCTION TO SHAKESPEARE
- ENGLIT 0590 - FORMATIVE MASTERPIECES
- ENGLIT 0597 - BIBLE AS LITERATURE
- ENGLIT 0610 - WOMEN AND LITERATURE
- ENGLIT 0616 - EXILES, NOMADS, AND MIGRANTS
- ENGLIT 0625 - DETECTIVE FICTION
- ENGLIT 0626 - SCIENCE FICTION
- ENGLIT 0628 - WORKING CLASS LITERATURE
- ENGLIT 0629 - THE WILD WEST
- ENGLIT 0630 - SEXUALITY AND REPRESENTATION
- ENGLIT 0636 - THE GOTHIC IMAGINATION
- ENGLIT 0640 - ALLEGORY
- ENGLIT 0642 - COMEDY
- ENGLIT 0643 - SATIRE
- ENGLIT 0644 - MYTH AND FOLKTALE
- ENGLIT 0645 - FANTASY
- ENGLIT 0655 - REPRESENTING ADOLESCENCE
- ENGLIT 1020 - HISTORY OF LITERARY CRITICISM
- ENGLIT 1028 - LITERATURE AND PSYCHOANALYSIS
- ENGLIT 1100 - MEDIEVAL IMAGINATION
- ENGLIT 1115 - CHAUCER
- ENGLIT 1125 - MASTERPIECES OF RENAISSANCE LITERATURE
- ENGLIT 1135 - LITERATURE, MEDIA, AND SCIENCE IN THE AGE OF SHAKESPEARE
- ENGLIT 1126 - ADVANCED SHAKESPEARE
- ENGLIT 1127 - SHAKESPEARE ON FILM
- ENGLIT 1128 - SHAKESPEARE'S SEXUALITIES
- ENGLIT 1150 - ENLIGHTENMENT TO REVOLUTION
- ENGLIT 1170 - ROMANTIC NATURE
- ENGLIT 1175 - 19TH CENTURY BRITISH LITERATURE
- ENGLIT 1180 - HUMANS, ANIMALS, MACHINES IN VICTORIAN LITERATURE
- ENGLIT 1181 - VICTORIAN NOVEL
- ENGLIT 1200 - AMERICAN LITERATURE TO 1860
- ENGLIT 1220 - CIVIL WAR TO WORLD WAR 1 IN AMERICAN LITERATURE
- ENGLIT 1272 - THE ROARING 20'S: FROM FARMERS TO FACTORY WORKERS, FROM FLAPPERS TO FINANCIERS
- ENGLIT 1325 - MODERNISM
- ENGLIT 1360 - TOPICS IN 20TH CENTURY LIT
- ENGLIT 1380 - WORLD LITERATURE IN ENGLISH
- ENGLIT 1645 - CRITL APPRCH TO CHILDREN'S LIT
- ENGLIT 1704 - WOMEN NOVELISTS
- ENGLIT 1756 - BALLADS AND BLUES
- ENGLIT 1738 - IRISH LITERATURE

English Writing additional information and requirements

- A minimum grade of C or better (not C-) is required in a 0500-level writing course to advance to the first 1000-level course in that track. Students who earn less than a C in their first 1000-level course may not advance to other courses in that track. Moreover, students must earn a C or better (not C-) grade in their senior seminar or internship course.

- Students are encouraged to take additional writing and literature courses beyond the required minimum. Courses in film studies, women's studies, business, and technical writing are particularly useful for English writing majors.
- Completion of at least one composition course is required for enrollment in a writing program course.
- ENGWRT 0400 - INTRODUCTION TO CREATIVE WRITING and ENGWRT 0411 - INTRODUCTION TO CREATIVE NONFICTION are optional introductory courses and may be taken during the second year by students who have recently declared a major in writing, are seriously considering writing as a major, or are taking their first 0500-level course. ENGWRT 0400 can only count as an elective towards the Writing degree if taken before ENGWRT 0520 or ENGWRT 0530. Likewise, ENGWRT 0411 may be taken as an elective before ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW.
- There is no limit on the number of courses English majors may take on an S/NC basis, either inside or outside the department.
- English writing majors automatically fulfill Dietrich School requirements for W courses. Students pursuing a second major are required to complete an additional W course for that major.
- Students who contemplate graduate study in English should remember that many schools do require second language competence, sometimes in more than one language.

The English department confers honors on those graduates who maintain a 3.25 overall GPA with a GPA of 3.50 or better in English department courses. The GPA is based on all English department courses, not just those that fulfill major requirements.

English Writing - Nonfiction Track, BA

English Writing Intro

The University of Pittsburgh's Writing Program is the oldest and one of the largest in the United States, offering tracks in fiction, poetry, nonfiction, and journalism. There is a wide variety of classes, and the maximum size is 22. The Writing Program has a full-time faculty of widely published writers, several visiting writers each year, and a number of part-time faculty who are senior reporters or editors at Pittsburgh newspapers and magazines. Graduates of the writing program include editors at major daily newspapers and publishing houses and winners of the Pulitzer Prize and other major awards.

For more information on the Department of English and the majors in English literature and in English writing, see www.english.pitt.edu.

Major Requirements

A minimum of 33 credits is required: 21 credits in English writing courses and 12 in English literature courses.

Majors must choose one of three tracks: fiction, poetry, and nonfiction. In most cases, students will take other writing courses as well. Each track consists of three levels of courses. The introductory courses (0500s) offer a broad introduction to the skills required of writers in a particular area and generally should be taken no later than the first term of the junior year. The intermediate courses (1000s for fiction, 1200s for poetry, 1300s for nonfiction) refine and develop those skills. The senior seminars (1700s) provide a capstone experience for the student writer. Students should check prerequisites carefully before registration.

Students must complete one of the following prerequisite courses before declaring the major.

- ENGCMP 0200 - SEMINAR IN COMPOSITION
- ENGCMP 0203 - SEMINAR IN COMPOSITION: GENDER STUDIES
- ENGCMP 0205 - SEMINAR IN COMPOSITION: FILM
- ENGCMP 0207 - SEMINAR IN COMPOSITION: EDUCATION
- ENGCMP 0208 - SEMINAR IN COMPOSITION: SERVICE-LEARNING
- ENGCMP 0210 - SEMINAR IN COMPOSITION: ENGINEERING
- ENGCMP 0212 - SEMINAR IN COMPOSITION: TOPICS IN DIVERSITY
- FP 0003 - FIRST-YEAR SEMINAR
- FP 0006 - FIRST-YEAR SEMINAR

Nonfiction Track

- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1390 - READINGS IN CONTEMPORARY NON-FICTION
- ENGWRT 1750 - SENIOR SEMINAR IN NONFICTION
- Three ENGWRT elective courses*

- Two ENGLIT elective courses from the list below
- One ENGLIT elective course at the 1000-level from the list below

One of the following courses

- ENGLIT 0321 - ESSAYS AND MEMOIRS

English Writing elective course info

Elective courses may be taken in another track if the student wishes.

English Literature approved courses

- ENGLIT 0500 - INTRODUCTION TO CRITICAL READING
- ENGLIT 0505 - HOW TO DO THINGS WITH LITERATURE 1
- ENGLIT 0560 - CHILDREN AND CULTURE
- ENGLIT 0562 - CHILDHOOD'S BOOKS
- ENGLIT 0570 - AMERICAN LITERATURE
- ENGLIT 0573 - LITERATURE OF THE AMERICAS
- ENGLIT 0580 - INTRODUCTION TO SHAKESPEARE
- ENGLIT 0590 - FORMATIVE MASTERPIECES
- ENGLIT 0597 - BIBLE AS LITERATURE
- ENGLIT 0610 - WOMEN AND LITERATURE
- ENGLIT 0616 - EXILES, NOMADS, AND MIGRANTS
- ENGLIT 0625 - DETECTIVE FICTION
- ENGLIT 0626 - SCIENCE FICTION
- ENGLIT 0628 - WORKING CLASS LITERATURE
- ENGLIT 0629 - THE WILD WEST
- ENGLIT 0630 - SEXUALITY AND REPRESENTATION
- ENGLIT 0636 - THE GOTHIC IMAGINATION
- ENGLIT 0640 - ALLEGORY
- ENGLIT 0642 - COMEDY
- ENGLIT 0643 - SATIRE
- ENGLIT 0644 - MYTH AND FOLKTALE
- ENGLIT 0645 - FANTASY
- ENGLIT 0655 - REPRESENTING ADOLESCENCE
- ENGLIT 1020 - HISTORY OF LITERARY CRITICISM
- ENGLIT 1028 - LITERATURE AND PSYCHOANALYSIS
- ENGLIT 1100 - MEDIEVAL IMAGINATION
- ENGLIT 1115 - CHAUCER
- ENGLIT 1125 - MASTERPIECES OF RENAISSANCE LITERATURE
- ENGLIT 1135 - LITERATURE, MEDIA, AND SCIENCE IN THE AGE OF SHAKESPEARE
- ENGLIT 1126 - ADVANCED SHAKESPEARE
- ENGLIT 1127 - SHAKESPEARE ON FILM
- ENGLIT 1128 - SHAKESPEARE'S SEXUALITIES
- ENGLIT 1150 - ENLIGHTENMENT TO REVOLUTION
- ENGLIT 1170 - ROMANTIC NATURE
- ENGLIT 1175 - 19TH CENTURY BRITISH LITERATURE
- ENGLIT 1180 - HUMANS, ANIMALS, MACHINES IN VICTORIAN LITERATURE
- ENGLIT 1181 - VICTORIAN NOVEL
- ENGLIT 1200 - AMERICAN LITERATURE TO 1860
- ENGLIT 1220 - CIVIL WAR TO WORLD WAR 1 IN AMERICAN LITERATURE
- ENGLIT 1272 - THE ROARING 20'S: FROM FARMERS TO FACTORY WORKERS, FROM FLAPPERS TO FINANCIERS
- ENGLIT 1325 - MODERNISM
- ENGLIT 1360 - TOPICS IN 20TH CENTURY LIT

- ENGLIT 1380 - WORLD LITERATURE IN ENGLISH
- ENGLIT 1645 - CRITL APPRCH TO CHILDREN'S LIT
- ENGLIT 1704 - WOMEN NOVELISTS
- ENGLIT 1756 - BALLADS AND BLUES
- ENGLIT 1738 - IRISH LITERATURE

English Writing additional information and requirements

- A minimum grade of C or better (not C-) is required in a 0500-level writing course to advance to the first 1000-level course in that track. Students who earn less than a C in their first 1000-level course may not advance to other courses in that track. Moreover, students must earn a C or better (not C-) grade in their senior seminar or internship course.
- Students are encouraged to take additional writing and literature courses beyond the required minimum. Courses in film studies, women's studies, business, and technical writing are particularly useful for English writing majors.
- Completion of at least one composition course is required for enrollment in a writing program course.
- ENGWRT 0400 - INTRODUCTION TO CREATIVE WRITING and ENGWRT 0411 - INTRODUCTION TO CREATIVE NONFICTION are optional introductory courses and may be taken during the second year by students who have recently declared a major in writing, are seriously considering writing as a major, or are taking their first 0500-level course. ENGWRT 0400 can only count as an elective towards the Writing degree if taken before ENGWRT 0520 or ENGWRT 0530. Likewise, ENGWRT 0411 may be taken as an elective before ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW.
- There is no limit on the number of courses English majors may take on an S/NC basis, either inside or outside the department.
- English writing majors automatically fulfill Dietrich School requirements for W courses. Students pursuing a second major are required to complete an additional W course for that major.
- Students who contemplate graduate study in English should remember that many schools do require second language competence, sometimes in more than one language.

The English department confers honors on those graduates who maintain a 3.25 overall GPA with a GPA of 3.50 or better in English department courses. The GPA is based on all English department courses, not just those that fulfill major requirements.

English Writing - Poetry Track, BA

English Writing Intro

The University of Pittsburgh's Writing Program is the oldest and one of the largest in the United States, offering tracks in fiction, poetry, nonfiction, and journalism. There is a wide variety of classes, and the maximum size is 22. The Writing Program has a full-time faculty of widely published writers, several visiting writers each year, and a number of part-time faculty who are senior reporters or editors at Pittsburgh newspapers and magazines. Graduates of the writing program include editors at major daily newspapers and publishing houses and winners of the Pulitzer Prize and other major awards.

For more information on the Department of English and the majors in English literature and in English writing, see www.english.pitt.edu.

Major Requirements

A minimum of 33 credits is required: 21 credits in English writing courses and 12 in English literature courses.

Majors must choose one of three tracks: fiction, poetry, and nonfiction. In most cases, students will take other writing courses as well. Each track consists of three levels of courses. The introductory courses (0500s) offer a broad introduction to the skills required of writers in a particular area and generally should be taken no later than the first term of the junior year. The intermediate courses (1000s for fiction, 1200s for poetry, 1300s for nonfiction) refine and develop those skills. The senior seminars (1700s) provide a capstone experience for the student writer. Students should check prerequisites carefully before registration.

Students must complete one of the following prerequisite courses before declaring the major.

- ENGCMP 0200 - SEMINAR IN COMPOSITION
- ENGCMP 0203 - SEMINAR IN COMPOSITION: GENDER STUDIES
- ENGCMP 0205 - SEMINAR IN COMPOSITION: FILM
- ENGCMP 0207 - SEMINAR IN COMPOSITION: EDUCATION
- ENGCMP 0208 - SEMINAR IN COMPOSITION: SERVICE-LEARNING
- ENGCMP 0210 - SEMINAR IN COMPOSITION: ENGINEERING
- ENGCMP 0212 - SEMINAR IN COMPOSITION: TOPICS IN DIVERSITY

- FP 0003 - FIRST-YEAR SEMINAR
- FP 0006 - FIRST-YEAR SEMINAR

Poetry Track

- ENGWRT 0530 - INTRODUCTION TO POETRY WRITING
- ENGWRT 1210 - POETRY WORKSHOP
- ENGWRT 1290 - READINGS IN CONTEMPORARY POETRY
- ENGWRT 1730 - SENIOR SEMINAR IN POETRY
- Three ENGWRT elective courses*
- ENGLIT 0315 - READING POETRY
- Two ENGLIT elective courses from the list below
- One ENGLIT elective course at the 1000-level from the list below

English Writing elective course info

Elective courses may be taken in another track if the student wishes.

English Literature approved courses

- ENGLIT 0500 - INTRODUCTION TO CRITICAL READING
- ENGLIT 0505 - HOW TO DO THINGS WITH LITERATURE 1
- ENGLIT 0560 - CHILDREN AND CULTURE
- ENGLIT 0562 - CHILDHOOD'S BOOKS
- ENGLIT 0570 - AMERICAN LITERATURE
- ENGLIT 0573 - LITERATURE OF THE AMERICAS
- ENGLIT 0580 - INTRODUCTION TO SHAKESPEARE
- ENGLIT 0590 - FORMATIVE MASTERPIECES
- ENGLIT 0597 - BIBLE AS LITERATURE
- ENGLIT 0610 - WOMEN AND LITERATURE
- ENGLIT 0616 - EXILES, NOMADS, AND MIGRANTS
- ENGLIT 0625 - DETECTIVE FICTION
- ENGLIT 0626 - SCIENCE FICTION
- ENGLIT 0628 - WORKING CLASS LITERATURE
- ENGLIT 0629 - THE WILD WEST
- ENGLIT 0630 - SEXUALITY AND REPRESENTATION
- ENGLIT 0636 - THE GOTHIC IMAGINATION
- ENGLIT 0640 - ALLEGORY
- ENGLIT 0642 - COMEDY
- ENGLIT 0643 - SATIRE
- ENGLIT 0644 - MYTH AND FOLKTALE
- ENGLIT 0645 - FANTASY
- ENGLIT 0655 - REPRESENTING ADOLESCENCE
- ENGLIT 1020 - HISTORY OF LITERARY CRITICISM
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- ENGLIT 1180 - HUMANS, ANIMALS, MACHINES IN VICTORIAN LITERATURE
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- ENGLIT 1272 - THE ROARING 20'S: FROM FARMERS TO FACTORY WORKERS, FROM FLAPPERS TO FINANCIERS
- ENGLIT 1325 - MODERNISM
- ENGLIT 1360 - TOPICS IN 20TH CENTURY LIT
- ENGLIT 1380 - WORLD LITERATURE IN ENGLISH
- ENGLIT 1645 - CRITL APPRCH TO CHILDREN'S LIT
- ENGLIT 1704 - WOMEN NOVELISTS
- ENGLIT 1756 - BALLADS AND BLUES
- ENGLIT 1738 - IRISH LITERATURE

English Writing additional information and requirements

- A minimum grade of C or better (not C-) is required in a 0500-level writing course to advance to the first 1000-level course in that track. Students who earn less than a C in their first 1000-level course may not advance to other courses in that track. Moreover, students must earn a C or better (not C-) grade in their senior seminar or internship course.
- Students are encouraged to take additional writing and literature courses beyond the required minimum. Courses in film studies, women's studies, business, and technical writing are particularly useful for English writing majors.
- Completion of at least one composition course is required for enrollment in a writing program course.
- ENGWRT 0400 - INTRODUCTION TO CREATIVE WRITING and ENGWRT 0411 - INTRODUCTION TO CREATIVE NONFICTION are optional introductory courses and may be taken during the second year by students who have recently declared a major in writing, are seriously considering writing as a major, or are taking their first 0500-level course. ENGWRT 0400 can only count as an elective towards the Writing degree if taken before ENGWRT 0520 or ENGWRT 0530. Likewise, ENGWRT 0411 may be taken as an elective before ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW.
- There is no limit on the number of courses English majors may take on an S/NC basis, either inside or outside the department.
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- Students who contemplate graduate study in English should remember that many schools do require second language competence, sometimes in more than one language.

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Public and Professional Writing

The Public and Professional Writing (PPW) major in the Department of English allows students to undertake rigorous intellectual work that will deepen their engagement with writing as a form of social action and professional exchange that has consequences in the world. Students in the major can expect to address critical questions in public and professional writing; learn how to use the forms and genres of particular professions or fields; learn how to compose effectively on behalf of an organization or campaign; learn how to create engaging documents and carry out inquiry projects for a particular audience; compose using appropriate modalities and technology; compose with awareness of textual forms and conventions; conduct responsible and ethical research; explore the history and politics of writing in specific contexts; engage with public debates over language, globalization, education, and writing; and compose as a creative and disciplined form of critical inquiry. PPW majors can expect to find jobs in the nonprofit sector, government, or the commercial sector.

Required courses for the major

The Public and Professional Writing BA requires the completion of 33 credits, distributed as follows.

Students may choose to follow clusters of courses that will lead to in-depth study in specific areas or for specific career paths: Writing to Support Scientific Research, Preparing for Law School, Writing for Nonprofits, Writing for Business, Teaching and Composition Studies, Advertising and PR Writing, Composing Digital Media, Editing and Publishing, Preparing for Graduate School, Public Engagement, and others. See the list of possible clusters that apply to this major.

Prerequisites

The Seminar in Composition requirement must be completed prior to enrollment in any ENGCMP courses at or above the 0400-level. A Seminar in Composition course can be selected from the following list.

- ENGCMP 0200 - SEMINAR IN COMPOSITION
- ENGCMP 0203 - SEMINAR IN COMPOSITION: GENDER STUDIES
- ENGCMP 0205 - SEMINAR IN COMPOSITION: FILM
- ENGCMP 0207 - SEMINAR IN COMPOSITION: EDUCATION
- ENGCMP 0208 - SEMINAR IN COMPOSITION: SERVICE-LEARNING
- ENGCMP 0210 - SEMINAR IN COMPOSITION: ENGINEERING
- FP 0003 - FIRST-YEAR SEMINAR
- FP 0006 - FIRST-YEAR SEMINAR

Core courses

- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 1551 - HISTORY AND POLITICS OF THE ENGLISH LANGUAGE

- ENGCMP 1900 - INTERNSHIP: PUBLIC/PROFESSIONAL WRITING or
- ENGCMP 1901 - UTA IN TEACHING AND TUTORING WRITING *

- ENGCMP 1910 - BRIDGE SEMINAR

Three 1000-level courses

Students must complete three ENGCMP courses at the 1000-level or above.

Three elective courses

Students must complete three courses at the 0400-level or above.

Grade requirements:

A minimum grade of C or better is required in any 0400- or 0500-level ENGCMP course to advance to the first 1000-level course.

Satisfactory/No Credit option:

There is no limit to the number of courses that may be taken on the S/NC basis for this major.

Writing (W) requirement:

Most ENGCMP courses satisfy the W requirement. Students pursuing a second major are required to complete an additional W-course for the major in that department.

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ENGCMP courses that fulfill requirements for the major

- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS
- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0425 - DIGITAL HUMANITY
- ENGCMP 0440 - CRITICAL WRITING
- ENGCMP 0450 - RESEARCH WRITING
- ENGCMP 0500 - TOPICS IN COMPOSITION
- ENGCMP 0510 - NARRATIVES OF THE WORKPLACE
- ENGCMP 0515 - PERSAUSIVE WRITING IN ADVERTISING
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0530 - WRITING FOR THE SCIENCES
- ENGCMP 0535 - WRITING IN THE HEALTH SCIENCE PROFESSIONS
- ENGCMP 0550 - TOPICS IN PUBLIC/PROFESSIONAL WRITING
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 0620 - THEORIES OF WRITING AND TEACHING
- ENGCMP 0641 - WRITING FOR CHANGE
- ENGCMP 1100 - LANGUAGE OF BUSINESS AND INDUSTRY
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1102 - LANGUAGE OF MEDICINE
- ENGCMP 1103 - PUBLIC RELATIONS WRITING
- ENGCMP 1104 - CORPORATE STORYTELLING
- ENGCMP 1111 - PROFESSIONAL WRITING IN GLOBAL CONTEXTS
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1151 - PROFESSIONAL EDITING IN CONTEXT
- ENGCMP 1200 - ADVANCED TOPICS IN COMPOSITION
- ENGCMP 1210 - TUTORING PEER WRITERS
- ENGCMP 1220 - THE ART OF THE ESSAY
- ENGCMP 1250 - ADVANCED TOPICS PUBLIC/PROFESSIONAL WRITING
- ENGCMP 1400 - GRANT WRITING
- ENGCMP 1410 - ADVANCED RESEARCH/DOCUMENTARY WRITING
- ENGCMP 1510 - WRITING WITH STYLE
- ENGCMP 1551 - HISTORY AND POLITICS OF THE ENGLISH LANGUAGE
- ENGCMP 1552 - LANGUAGE, LITERACY, LEARNING
- ENGCMP 1900 - INTERNSHIP: PUBLIC/PROFESSIONAL WRITING
- ENGCMP 1901 - UTA IN TEACHING AND TUTORING WRITING
- ENGCMP 1902 - INDEPENDENT STUDY PUBLIC PROFESSIONAL WRITING
- ENGCMP 1903 - SERVICE-LEARNING SEMINAR IN PUBLIC AND PROFESSIONAL WRITING
- ENGCMP 1910 - BRIDGE SEMINAR

Minor

Creative Writing Minor

As one of the oldest writing programs in the United States, the Writing Program at the University of Pittsburgh has an excellent record of not only producing talented creative writers but also developing the writing skills of undergraduates who go on to work in a variety of professions, including journalism, education, law, and publishing. The minor in Creative Writing fulfills a need that is different from the Certificate in Professional Writing, with its particular focus on writing in business, non-profit, and legal environments, and the Writing Major, which requires a more substantial commitment of time and study.

Before declaring the minor in Creative Writing, students must complete an English Composition course (ENGCMP 0200, ENGCMP 0203, ENGCMP 0205, ENGCMP 0207, or ENGCMP 0208) to develop the skills necessary for effectively reading and writing at the college level. Students must take ENGWRT 0400 - INTRODUCTION TO CREATIVE WRITING.

This minor requires students to complete 18 credits of coursework as follows.

One of the following groups of courses.

Fiction

- ENGWRT 0520 - INTRODUCTION TO FICTION WRITING
- ENGWRT 1010 - INTERMEDIATE FICTION
- ENGWRT 1094 - READINGS IN CONTEMPORARY FICTION

Poetry

- ENGWRT 0530 - INTRODUCTION TO POETRY WRITING
- ENGWRT 1210 - POETRY WORKSHOP
- ENGWRT 1290 - READINGS IN CONTEMPORARY POETRY

Nonfiction

- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1390 - READINGS IN CONTEMPORARY NON-FICTION

Two of the following courses.

- ENGWRT 0520 - INTRODUCTION TO FICTION WRITING
- ENGWRT 0530 - INTRODUCTION TO POETRY WRITING
- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION
- ENGWRT 1090 - MASTERING POINT OF VIEW
- ENGWRT 1091 - AUTOBIOGRAPHY AND CREATIVE IMPULSE
- ENGWRT 1092 - WRITER'S JOURNALS
- ENGWRT 1095 - TOPICS IN FICTION
- ENGWRT 1399 - TOPICS IN NON-FICTION: NEWSPAPER
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA
- ENGWRT 1650 - PLAYWRITING 1

English Literature Minor

An undergraduate minor in English literature would help students in a variety of majors to represent significant expertise they have accrued in this field on their transcripts. The structure of the minor will also help direct students with a significant interest in English literature to sequences and sets of courses that are designed to develop their interest; they can take a mini-curriculum rather than just a smattering of electives. A minor in English literature is a desirable supplement to many degrees across the Dietrich School because it provides insights into cultural traditions and practices, develops students' abilities to write analytic arguments, and promotes critical thinking.

The minor consists of 18 credits and comprises the following courses.

- ENGLIT 0505 - HOW TO DO THINGS WITH LITERATURE 1
- ENGLIT 0506 - LITERARY FIELD STUDIES
- Two elective courses at the 0500-level or above
- Two elective courses at the 1000-level or above
- ENGLIT 1900 - PROJECT SEMINAR is recommended but not required.

Joint Major

Digital Narrative and Interactive Design, BA/BS

Digital Narrative and Interactive Design Requirements

The Digital Narrative and Interactive Design major (DNID) harnesses the narrative, world-building, and media studies strengths of the English department and the coding, software development, and human computer interface strengths of the School of Computing and Information. It draws upon existing initiatives in game design at SCI and critical game studies, making, and media production within the English department. Students will learn how to build interactive narrative systems such as games, interactive literature, virtual reality environments and other interactive media experiences in a variety of fields. They will learn to creatively combine design with narrative, code with story. This uniquely positions majors in today's workforce: game and interactive media design is booming in nearly every field and sector. What these positions require, and what is currently in short supply, are individuals capable of both understanding the intricacies of narrative and implementing that knowledge in the form of computational media (coded interactive systems).

The DNID major is managed jointly by the Dietrich School of Arts and Sciences and the School of Computing and Information. This program offers training that builds a solid foundation in English (Writing, Composition, Film and Media Studies, and Literature), Computer Science, and Information Science.

Core and Upper Level Courses

Gateway course

Choose one of the following courses.

- ENGLIT 0512 - NARRATIVE AND TECHNOLOGY
- ENGCMP 0425 - DIGITAL HUMANITY
- HAA 0425 - DIGITAL HUMANITY

Composition courses

Complete either:

- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN
- ENGLIT 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN
- CMPINF 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN

Programming Basis course

Choose one of the following courses.

- CS 0010 - INTRODUCTION TO COMPUTING FOR SYSTEMS ENGINEERS
- CS 0011 - INTRODUCTION TO COMPUTING FOR SCIENTISTS
- CS 0012 - INTRODUCTION TO COMPUTING FOR THE HUMANITIES
- INFSCI 0419 - PYTHON PROGRAMMING FOR DATA MANAGEMENT & ANALYTICS

Intermediate Programming course

- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- INFSCI 0017 - FUNDAMENTALS OF OBJECT-ORIENTED PROGRAMMING

Interaction and Narrative course

Choose one of the following courses. Students who take ENGLIT 0512 for their Gateway course may not use it to fulfill this requirement.

- ENGLIT 0512 - NARRATIVE AND TECHNOLOGY
- ENGLIT 0702 - INTRODUCTION TO GAME STUDIES
- ENGLIT 1001 - INTERACTIVE LITERATURE
- ENGLIT 1002 - GAME, STORY, PLAY

Media Literacy course

Choose one of the following courses.

- ENGFLM 0355 - VISUAL LITERACY
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 1680 - ANIMATION STUDIES
- FMST 0100 - VISUAL LITERACY
- FMST 0505 - INTRODUCTION TO NEW MEDIA
- FMST 1510 - ANIMATION STUDIES

Data Literacy course

Choose one of the following courses.

- CS 0445 - DATA STRUCTURES
- INFSCI 1022 - DATABASE MANAGEMENT SYSTEMS

Elective courses

Students must complete two elective courses from the **School of Computing and Information** and two elective courses from the **Dietrich School of Arts and Sciences**. Courses offering a depth of knowledge in pre-identified areas of interest are clustered together to provide a guide for students; Students are not required to follow nor declare a specific track.

Online Media track

School of Computing and Information courses

Choose two of the following courses.

- CS 0590 - SOCIAL IMPLICATIONS OF COMPUTING TECHNOLOGY
- CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS
- INFSCI 1024 - ANALYSIS OF INFORMATION SYSTEMS
- INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN
- INFSCI 1052 - USER CENTERED DESIGN
- INFSCI 1068 - GEOSPATIAL INFORMATION SYSTEMS (GIS)

Dietrich School of Arts and Sciences courses

Choose two of the following courses.

- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGLIT 0812 - MEDIA/ECOLOGY
- ENGLIT 1001 - INTERACTIVE LITERATURE
- ENGLIT 1412 - SECRET PITTSBURGH
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA
- ENGWRT 1501 - TOPICS IN CREATIVE WRITING

- GSWS 1210 - GENDER AND THE DIGITAL
- ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE

Game Design track

School of Computing and Information courses

Choose two of the following courses.

- CS 1566 - INTRODUCTION COMPUTER GRAPHICS
- CS 1666 - PRINCIPLES OF COMPUTER GAME DESIGN AND IMPLEMENTATION
- CS 1674 - INTRODUCTION TO COMPUTER VISION
- INFSCI 1014 - GRAPHICS
- INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN
- INFSCI 1060 - GAME DESIGN
- INFSCI 1061 - GAME IMPLEMENTATION

Dietrich School of Arts and Sciences courses

Choose two of the following courses.

- ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGLIT 0702 - INTRODUCTION TO GAME STUDIES
- ENGLIT 0812 - MEDIA/ECOLOGY
- ENGLIT 1001 - INTERACTIVE LITERATURE
- ENGLIT 1002 - GAME, STORY, PLAY
- ENGLIT 1355 - VIRTUAL REALITY
- ENGWRT 0520 - INTRODUCTION TO FICTION WRITING

Critical Making track

School of Computing and Information courses

Choose two of the following courses.

- CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS
- CS 1567 - PROGRAMMING SYSTEM DESIGN ON A MOBILE ROBOT PLATFORM
- CS 1571 - INTRODUCTION TO ARTIFICIAL INTELLIGENCE
- INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN
- INFSCI 1059 - WEB PROGRAMMING

Dietrich School of Arts and Sciences courses

Choose two of the following courses.

- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0712 - CRITICAL MAKING
- ENGCMP 1200 - ADVANCED TOPICS IN COMPOSITION
- ENGFLM 0590 - FILMMAKING: PRODUCTION AND CRITICISM
- ENGFLM 0712 - CRITICAL MAKING
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGLIT 0521 - SCAN CULTURE: SURVEILLANCE AND THE DIGITAL
- ENGLIT 0712 - CRITICAL MAKING
- ENGLIT 0812 - MEDIA/ECOLOGY

- ENGLIT 1355 - VIRTUAL REALITY
- ENGWRT 1501 - TOPICS IN CREATIVE WRITING

Capstone sequence

The Capstone sequence allows students to design and implement a signature project to complete the major. Students start with the design project (Project 1) and complete the sequence with the implementation project (Project 2) in consultation with their advisors. Students seeking Independent Study or Directed Study options for the capstone sequence should work with their advisors to ensure that the work done in these courses will complete the sequence.

Project 1

Choose one of the following courses.

- ENGCMP 1910 - BRIDGE SEMINAR
- ENGLIT 1900 - PROJECT SEMINAR
- ENGLIT 1901 - INDEPENDENT STUDY

Project 2

- CMPINF 1981 - PROJECT STUDIO
- CS 1902 - DIRECTED STUDY

Additional Information

Writing (W) requirement: Dietrich School students must complete at least one W-course in the major. ENGCMP 0610 fulfills this requirement.

Grade requirements: A letter grade of C or better is required in each of the core and upper level courses that are to count toward the major. The elective courses for the major must also be completed with a grade of C or better. A minimum GPA of 2.0 in all departmental courses taken is required for graduation. If a D+ or lower is earned in an elective course for the major but is not repeated, the course will be used to calculate the overall GPA but will not be counted toward the 40 credits required for the major.

Satisfactory/No Credit option: No courses that count toward the major may be taken on an S/NC basis.

Advising: Digital Narrative and Interactive Design is a joint undergraduate degree between the Dietrich School of Arts and Sciences and the School of Computing and Information. Students enrolled in each school are advised by advisors within that school.

Certificate

Public Communication of Science and Technology

The program allows students to pursue a relevant internship and offers a capstone experience that will pull the various threads of their study together. Many of the courses satisfy the Writing requirement; select courses also satisfy the Diversity, Creative Work, Historical Analysis, and Literature requirements. As we develop other courses for the certificate, we aim to design them to satisfy other DSAS GERs.

Students who plan to complete this certificate are strongly encouraged to pursue a major or minor in science or in math.

Students need a total of 18 credits, including 15 credits in relevant writing-intensive courses from the list of courses that count. Students who complete their 3-credit relevant in-major W course in science with a C or better can instead complete 12 writing-intensive credits and up to 6 credits of non-writing intensive courses from the list of certificate electives. Double counting of credits will be consistent with the current Dietrich School and University policies. Eligible in-major W courses will be posted on the PCST Web page.

Core Course (3 credits)

- ENGCMP 0430 - PUBLIC COMMUNICATION OF SCIENCE AND TECHNOLOGY

Capstone Course (3 credits)

- ENGCMP 1910 - BRIDGE SEMINAR

Using Information Technology (3 credits)

- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION

Elective Courses for the Certificate (9 credits)

Reminder: Students can't count courses toward both their majors and a certificate.

- ENGCMP 0401 - WRITTEN PROFESSIONAL COMMUNICATION: TOPICS IN DIVERSITY
- ENGCMP 0412 - ENGINEERING COMMUNICATION IN A PROFESSIONAL CONTEXT
- ENGCMP 0430 - PUBLIC COMMUNICATION OF SCIENCE AND TECHNOLOGY
- ENGCMP 0432 - WRITING FOR ENVIRONMENTAL ADVOCACY
- ENGCMP 0450 - RESEARCH WRITING
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0521 - WRITING WITH DATA
- ENGCMP 0530 - WRITING FOR THE SCIENCES
- ENGCMP 0535 - WRITING IN THE HEALTH SCIENCE PROFESSIONS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1102 - LANGUAGE OF MEDICINE
- ENGCMP 1900 - INTERNSHIP: PUBLIC/PROFESSIONAL WRITING
- ENGFLM 0585 - TECHNOLOGIES OF THE BODY
- FMST 0790 - TECHNOLOGIES OF THE BODY
- ENGLIT 0512 - NARRATIVE AND TECHNOLOGY
- ENGLIT 0541 - LITERATURE AND MEDICINE
- ENGLIT 0612 - LITERATURE AND SCIENCE
- ENGLIT 0710 - CONTEMPORARY ENVIRONMENTAL LITERATURE
- ENGLIT 1005 - LITERATURE AND THE ENVIRONMENT
- ENGWRT 1394 - SCIENCE WRITING
- GSWS 0400 - GENDER AND SCIENCE

Grade Requirement

Students are expected to achieve a minimum grade of C in each course required for this certificate.

Note

The Writing Institute is willing to work with departments that want to develop appropriate writing-intensive courses for this certificate. We are also happy to hear from departments that believe they already have a qualifying course.

New Courses and Experiential Learning
This certificate will require that we create the PCST Capstone course: a projects-focused course that will also invite faculty from other departments or centers to join the course for a week or two to share their expertise with undergraduates, often engaging them in cutting-edge work that is usually available only to graduate students.

To enhance our offerings for students invested in this area, we also plan to create Grant Writing for Research, a course that will better serve students who know that they will need to write grant proposals to support their work (they are currently taking Grant Writing with students who want to learn about nonprofit work).

We are proposing these courses in Spring 2020, so that they will be in place during AY 20-21. The other ENGCMP courses listed for this certificate already exist and are offered regularly. They are popular with students in the natural sciences, Engineering, and SHRS.

Students will have the option of completing a writing-intensive internship (ENGCMP 1900). Students may, for example, pursue an internship at the Clinical and Translational Science Institute, where they would provide educational and background material about research studies, write descriptions of research studies for the database in terms lay people can understand, create social media posts that meet regulatory criteria, and read researchers' manuscripts and put them into understandable news release and video forms. We already have several possible internships for students with this set of interests and we will work on identifying more.

Film and Media Studies Program

While film studies is not a department, it is an interdisciplinary program and an administrative unit offering both a major and a minor in film studies. Film is one of the major cultural forms of the 20th century, and its study has become an important part of a modern humanities education. At the University of Pittsburgh, the Film and Media Studies Program provides a series of interdisciplinary courses concerning the history, aesthetics, theory, and production of cinema. The program provides courses in critical studies, film, photography, and video production. A major in Film and Media Studies helps students to understand and appreciate the cinematic medium and to be aware of its impact as a cultural and artistic force. It is also appropriate for students who wish to pursue careers in film teaching, film journalism, film museum curatorial work, film library and archival work, and film and television production. As part of the Film and Media Studies Program, internships are made available to students in many of these fields. In the past, students have done internships at the Carnegie Museum of Art, the Pittsburgh Film Office, Pittsburgh Filmmakers, and various television stations.

Various options are available to students interested in Film and Media Studies. For those students who wish to make film studies the primary focus of their undergraduate program, it is possible to pursue an interdisciplinary major in Film and Media Studies. For those students who wish to major in another area but desire a focus in film studies, a minor in Film and Media Studies is available. In addition, many students choose to take elective courses in film studies as part of their undergraduate curriculum.

For more information on the film studies major, see www.filmstudies.pitt.edu/.

Major

Film and Media Studies, BA

In the Spring of 2018, the Film Studies BA was renamed to Film and Media Studies BA. Students who were enrolled prior to the Spring 2018 term have the option to stay Film Studies majors or change to the Film and Media Studies major. They will have until the end of the Fall 2017 term to choose to complete the program under the current name. Students who choose to complete their program under the current name must do so by Summer 2020 term. There are no program requirement changes. The Film and Media Studies major requires the completion of 36 credits in either the **Critical Studies** or the **Production** track, distributed as follows.

Film studies courses fall into three categories:

- National Cinemas or Film
- Themes, Genres, or Theory
- Production

Critical Studies track requirements

Critical Studies courses

- ENGFLM 0530 - FILM ANALYSIS
- ENGFLM 0540 - WORLD FILM HISTORY
- ENGFLM 1920 - ADVANCED SEMINAR IN FILM STUDIES

Production course

Students must take one of the following production courses.

- FILMST 0001 - FILMMAKING 1: FUNDAMENTALS
- ENGFLM 0590 - FILMMAKING: PRODUCTION AND CRITICISM
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1

Two National Cinemas or Film courses

Students must take two courses from the National Cinemas or Film course category listed below.

Two Themes, Genres, or Theory courses

Students must take two courses from the Themes, Genres, or Theory category listed below.

Four elective courses

Students must select four courses from the three categories below:

1. National Cinemas or Film
2. Themes, Genres, or Theory
3. Production

Production track requirements

Foundational course

Select one course from the following list.

- ENGFLM 0590 - FILMMAKING: PRODUCTION AND CRITICISM
- FILMST 0001 - FILMMAKING 1: FUNDAMENTALS

Film and Media Production courses

- ENGWRT 0560 - SCREENWRITING AND NARRATIVE **or**
- FILMST 1132 - ELEMENTS OF SCREENWRITING
- FILMST 0601 - FILMMAKING 2: SIGHT AND SOUND **or**
- SA 1380 - DIGITAL STUDIO: VIDEO
- FILMST 1130 - DIRECTING MOTION PICTURES
- FILMST 1600 - FILMMAKING 3: STORY TO SCREEN
- FILMST 1921 - FILMMAKING 4: CAPSTONE

Technical elective course

Select one of the following courses.

- FILMST 0121 - ANIMATION 1
- FILMST 0610 - DIGITAL EFFECTS 1
- FILMST 1120 - DIRECTING ACTORS
- FILMST 1133 - INTERMEDIATE SCREENWRITING
- FILMST 1145 - SOUND FOR MOTION PICTURES
- FILMST 1157 - LIGHTING FOR MOTION PICTURES
- FILMST 1580 - DIGITAL CINEMATOGRAPHY

Topical elective courses

Select two of the following courses.

- ENGFLM 0585 - TECHNOLOGIES OF THE BODY
- ENGFLM 0712 - CRITICAL MAKING
- ENGFLM 1671 - MAKING THE DOCUMENTARY
- ENGFLM 1672 - VISITING FILMMAKER: PRODUCTION AND CRITICISM

- ENGFLM 1684 - MOCKUMENTARY: PRODUCTION AND CRITICISM
- ENGFLM 1750 - CREATIVE PRODUCTION WORKSHOP
- ENGFLM 1930 - INTERNSHIP IN FILM

Two category courses

Students must take two courses from either the **National Cinemas or Film** or the **Themes, Genres, or Theory** category listed below.

Critical Studies courses

Both of the following courses are required.

- ENGFLM 0530 - FILM ANALYSIS
- ENGFLM 0540 - WORLD FILM HISTORY

National Cinemas or Film courses

- CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM
- CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN
- CHIN 1088 - NEW CHINESE CINEMA
- CHIN 1089 - THE WORLD OF CHINA
- ENGFLM 1190 - BRITISH FILM
- ENGFLM 1192 - IRISH FILM
- ENGFLM 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES
- ENGFLM 1290 - AMERICAN FILM 1
- ENGFLM 1291 - AMERICAN FILM 2
- ENGFLM 1390 - CONTEMPORARY FILM
- ENGFLM 1410 - BOLLYWOOD AND INDIAN CINEMA
- ENGFLM 1420 - TRANSNATIONAL EAST ASIAN CINEMAS
- ENGFLM 1470 - FILM DIRECTORS
- ENGFLM 1471 - ORSON WELLES
- ENGFLM 1472 - HITCHCOCK'S FILMS
- ENGFLM 1473 - SPIKE LEE
- ENGFLM 1476 - THE FILMS OF STANLEY KUBRICK
- ENGFLM 1670 - GLOBAL ANIME
- HAA 1805 - EARLY FRENCH FILM
- HAA 1806 - AMERICAN INDEPENDENT FILM
- HIST 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES
- ITAL 0086 - ITALIAN CINEMA
- ITAL 0088 - ITALIAN AMERICA ON SCREEN
- ITAL 1089 - SPECIAL TOPICS
- JPNSE 1057 - JAPANESE CULTURE AND SOCIETY THROUGH CINEMA
- POLISH 0870 - CONTEMPORARY POLISH CINEMA:LITERATURE ON FILM
- RUSS 0870 - RUSSIAN FILM: EISENSTEIN AND COMPANY
- RUSS 0871 - RUSSIAN FILM STALIN TO PUTIN
- SLOVAK 0890 - SLOVAK, CZECH, AND CENTRAL EUROPEAN FILM
- SPAN 1404 - LATIN AMERICAN TOPICS
- SPAN 1407 - U.S. LATINO FILM
- SPAN 1603 - PENINSULAR TOPICS

Themes, Genres, or Theory

- ENGFLM 0400 - INTRODUCTION TO FILM or
- ENGFLM 0401 - INTRODUCTION TO VISUAL CULTURE
- ENGFLM 0520 - FILM THEORY

- ENGFLM 0532 - INTRODUCTION TO FILM GENRES
- ENGFLM 0540 - WORLD FILM HISTORY
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGFLM 1391 - TOPICS IN CONTEMPORARY CINEMA
- ENGFLM 1479 - CHILDREN AND MEDIA
- ENGFLM 1480 - TOPICS IN FILM
- ENGFLM 1481 - TEEN FILM
- ENGFLM 1482 - THE STAR SYSTEM AND THE MOVIES
- ENGFLM 1483 - FILM SOUND
- ENGFLM 1485 - FILM AND POLITICS
- ENGFLM 1487 - FILM CENSORSHIP AND AMERICAN CULTURE
- ENGFLM 1489 - CULT FILM
- ENGFLM 1610 - TOPICS IN GENRE
- ENGFLM 1613 - TOPICS IN FILM GENRE AND THEME
- ENGFLM 1615 - THE WAR FILM
- ENGFLM 1680 - ANIMATION STUDIES
- ENGFLM 1681 - FILM COMEDY
- ENGFLM 1683 - DOCUMENTARY FILM
- ENGFLM 1685 - FILM MUSICAL
- ENGFLM 1688 - FILM WESTERN
- ENGFLM 1695 - HORROR FILM
- ENGFLM 1696 - FILM NOIR
- ENGFLM 1699 - SCIENCE FICTION FILM
- ENGFLM 1703 - GENDER AND FILM
- ENGFLM 1752 - TELEVISION ANALYSIS
- ENGFLM 1760 - CINEMA AND VIDEO GAMES
- ENGFLM 1790 - FILM AND LITERATURE
- ENGFLM 1920 - ADVANCED SEMINAR IN FILM STUDIES
- HAA 0470 - PHOTOGRAPHY AND ART
- HAA 0810 - EXPERIMENTAL CINEMA
- HAA 1806 - AMERICAN INDEPENDENT FILM
- HAA 1820 - DOCUMENTARY FILM
- JPNSE 1058 - WESTERNS AND SAMURAI FILMS
- JPNSE 1059 - JAPANESE LITERATURE ON SCREEN

Production

- ENGFLM 0585 - TECHNOLOGIES OF THE BODY
- ENGFLM 0712 - CRITICAL MAKING
- ENGFLM 1671 - MAKING THE DOCUMENTARY
- ENGFLM 1672 - VISITING FILMMAKER: PRODUCTION AND CRITICISM
- ENGFLM 1684 - MOCKUMENTARY: PRODUCTION AND CRITICISM
- ENGFLM 1750 - CREATIVE PRODUCTION WORKSHOP
- ENGFLM 1930 - INTERNSHIP IN FILM
- ENGWRT 0560 - SCREENWRITING AND NARRATIVE
- FILMST 0001 - FILMMAKING 1: FUNDAMENTALS
- FILMST 0121 - ANIMATION 1
- FILMST 0225 - STUDIO LIGHTING
- FILMST 0400 - POST-PRODUCTION
- FILMST 0601 - FILMMAKING 2: SIGHT AND SOUND
- FILMST 1130 - DIRECTING MOTION PICTURES
- FILMST 1132 - ELEMENTS OF SCREENWRITING
- FILMST 1133 - INTERMEDIATE SCREENWRITING
- FILMST 1140 - ACTING FOR THE CAMERA
- FILMST 1145 - SOUND FOR MOTION PICTURES
- FILMST 1157 - LIGHTING FOR MOTION PICTURES

- FILMST 1580 - DIGITAL CINEMATOGRAPHY
- FILMST 1600 - FILMMAKING 3: STORY TO SCREEN
- FILMST 1901 - INDEPENDENT STUDY
- FILMST 1921 - FILMMAKING 4: CAPSTONE

Additional Rules and Requirements

ENGFLM 0530 and ENGFLM 0540: The Film and Media Studies program recommends that students complete ENGFLM 0530 - FILM ANALYSIS and ENGFLM 0540 - WORLD FILM HISTORY or their equivalents prior to taking any 1000-level film courses.

1000-level courses: At least five courses that count toward the major must be taken at the 1000-level.

Production courses: No more than five production courses may be counted toward the major (Standard track). Additional production courses may be taken to meet the minimum credit requirement for graduation.

Grade requirements: A minimum GPA of 2.0 in departmental courses is required for graduation.

Satisfactory/No Credit option: No more than three courses that count toward the major can be taken on an S/NC basis.

Internship: Only one 3-credit film internship can be counted toward the major.

Writing (W) requirement: Students must complete at least one W-course in the major.

Minor

Film and Media Studies Minor

In the spring of 2018, the Film Studies minor was renamed to Film and Media Studies minor. Students who were enrolled prior to the Spring 2018 term have the option to stay Film Studies minor or change to the Film and Media Studies minor. They will have until the end of the Fall 2017 term to choose to complete the program under the current name. Students who choose to complete their program under the current name must do so by Summer 2020 term. There are no program requirement changes.

Required Courses

Two Critical Studies Courses

- ENGFLM 0530 - FILM ANALYSIS
- ENGFLM 0540 - WORLD FILM HISTORY

Four Elective Courses

Elective courses must be taken from at least two of the three categories:

- National Cinemas or Film
- Themes, Genres, or Theory
- Production

No more than two courses can be taken from the **Production** category.

National Cinemas or Film courses

- CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM
- CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN
- CHIN 1088 - NEW CHINESE CINEMA
- CHIN 1089 - THE WORLD OF CHINA
- ENGFLM 1190 - BRITISH FILM
- ENGFLM 1192 - IRISH FILM

- ENGFLM 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES
- ENGFLM 1290 - AMERICAN FILM 1
- ENGFLM 1291 - AMERICAN FILM 2
- ENGFLM 1390 - CONTEMPORARY FILM
- ENGFLM 1410 - BOLLYWOOD AND INDIAN CINEMA
- ENGFLM 1420 - TRANSNATIONAL EAST ASIAN CINEMAS
- ENGFLM 1470 - FILM DIRECTORS
- ENGFLM 1471 - ORSON WELLES
- ENGFLM 1472 - HITCHCOCK'S FILMS
- ENGFLM 1473 - SPIKE LEE
- ENGFLM 1476 - THE FILMS OF STANLEY KUBRICK
- ENGFLM 1670 - GLOBAL ANIME
- HAA 1805 - EARLY FRENCH FILM
- HAA 1806 - AMERICAN INDEPENDENT FILM
- HIST 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES
- ITAL 0086 - ITALIAN CINEMA
- ITAL 0088 - ITALIAN AMERICA ON SCREEN
- ITAL 1089 - SPECIAL TOPICS
- JPNSE 1057 - JAPANESE CULTURE AND SOCIETY THROUGH CINEMA
- POLISH 0870 - CONTEMPORARY POLISH CINEMA:LITERATURE ON FILM
- RUSS 0870 - RUSSIAN FILM: EISENSTEIN AND COMPANY
- RUSS 0871 - RUSSIAN FILM STALIN TO PUTIN
- SLOVAK 0890 - SLOVAK, CZECH, AND CENTRAL EUROPEAN FILM
- SPAN 1404 - LATIN AMERICAN TOPICS
- SPAN 1407 - U.S. LATINO FILM
- SPAN 1603 - PENINSULAR TOPICS

Themes, Genres, or Theory

- ENGFLM 0400 - INTRODUCTION TO FILM or
- ENGFLM 0401 - INTRODUCTION TO VISUAL CULTURE
- ENGFLM 0520 - FILM THEORY
- ENGFLM 0532 - INTRODUCTION TO FILM GENRES
- ENGFLM 0540 - WORLD FILM HISTORY
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGFLM 1391 - TOPICS IN CONTEMPORARY CINEMA
- ENGFLM 1479 - CHILDREN AND MEDIA
- ENGFLM 1480 - TOPICS IN FILM
- ENGFLM 1481 - TEEN FILM
- ENGFLM 1482 - THE STAR SYSTEM AND THE MOVIES
- ENGFLM 1483 - FILM SOUND
- ENGFLM 1485 - FILM AND POLITICS
- ENGFLM 1487 - FILM CENSORSHIP AND AMERICAN CULTURE
- ENGFLM 1489 - CULT FILM
- ENGFLM 1610 - TOPICS IN GENRE
- ENGFLM 1613 - TOPICS IN FILM GENRE AND THEME
- ENGFLM 1615 - THE WAR FILM
- ENGFLM 1680 - ANIMATION STUDIES
- ENGFLM 1681 - FILM COMEDY
- ENGFLM 1683 - DOCUMENTARY FILM
- ENGFLM 1685 - FILM MUSICAL
- ENGFLM 1688 - FILM WESTERN
- ENGFLM 1695 - HORROR FILM
- ENGFLM 1696 - FILM NOIR
- ENGFLM 1699 - SCIENCE FICTION FILM
- ENGFLM 1703 - GENDER AND FILM

- ENGFLM 1752 - TELEVISION ANALYSIS
- ENGFLM 1760 - CINEMA AND VIDEO GAMES
- ENGFLM 1790 - FILM AND LITERATURE
- ENGFLM 1920 - ADVANCED SEMINAR IN FILM STUDIES
- HAA 0470 - PHOTOGRAPHY AND ART
- HAA 0810 - EXPERIMENTAL CINEMA
- HAA 1806 - AMERICAN INDEPENDENT FILM
- HAA 1820 - DOCUMENTARY FILM
- JPNSE 1058 - WESTERNS AND SAMURAI FILMS
- JPNSE 1059 - JAPANESE LITERATURE ON SCREEN

Production

- ENGFLM 0585 - TECHNOLOGIES OF THE BODY
- ENGFLM 0712 - CRITICAL MAKING
- ENGFLM 1671 - MAKING THE DOCUMENTARY
- ENGFLM 1672 - VISITING FILMMAKER: PRODUCTION AND CRITICISM
- ENGFLM 1684 - MOCKUMENTARY: PRODUCTION AND CRITICISM
- ENGFLM 1750 - CREATIVE PRODUCTION WORKSHOP
- ENGFLM 1930 - INTERNSHIP IN FILM
- ENGWRT 0560 - SCREENWRITING AND NARRATIVE
- FILMST 0001 - FILMMAKING 1: FUNDAMENTALS
- FILMST 0121 - ANIMATION 1
- FILMST 0225 - STUDIO LIGHTING
- FILMST 0400 - POST-PRODUCTION
- FILMST 0601 - FILMMAKING 2: SIGHT AND SOUND
- FILMST 1130 - DIRECTING MOTION PICTURES
- FILMST 1132 - ELEMENTS OF SCREENWRITING
- FILMST 1133 - INTERMEDIATE SCREENWRITING
- FILMST 1140 - ACTING FOR THE CAMERA
- FILMST 1145 - SOUND FOR MOTION PICTURES
- FILMST 1157 - LIGHTING FOR MOTION PICTURES
- FILMST 1580 - DIGITAL CINEMATOGRAPHY
- FILMST 1600 - FILMMAKING 3: STORY TO SCREEN
- FILMST 1901 - INDEPENDENT STUDY
- FILMST 1921 - FILMMAKING 4: CAPSTONE

Note:

Only one elective course for the minor can be taken on an S/NC basis. Half of the courses for the minor must be taken at Pitt. Students pursuing the minor must meet with the film studies advisors to check their progress. Courses taken at other schools must be approved.

Department of French and Italian

A major in French and/or Italian gives students at the University of Pittsburgh the opportunity to study a second language in detail and to acquire an education in a literary and cultural tradition central to the humanities. Studying French and/or Italian language and literature prepares students for graduate study in law and international affairs; advanced work in the humanities; and careers in business, governmental service, and teaching. The University is committed to international study, and students are encouraged to take advantage of the numerous opportunities to study abroad. Students can also combine a major in French and/or Italian with a second major in a field such as political science, history, biology, or economics. Students who choose to study the grammar, linguistics, rhetoric, literature, and film of Italy and/or the Francophone world will acquire an invaluable technical resource and an in-depth knowledge of a diverse and foundational intellectual tradition. Students may also minor in French and/or Italian. For more information on the Department of French and Italian Languages and Literatures, see our Web site at www.frenchanditalian.pitt.edu.

Major

French, BA

A major in French gives students the opportunity to study in detail a foreign language and to acquire an education in a literary and cultural tradition central to the humanities. Studying French language and literature prepares students for graduate study in law and international affairs, advanced work in the humanities, and careers in business, government service, and teaching. Students are encouraged to take advantage of the numerous opportunities to study abroad. They can combine a major in French with a second major in a field such as political science, history, biology, or economics. Students who choose to study the grammar, linguistics, rhetoric, literature, and film of the Francophone world will acquire an invaluable technical resource and an in-depth knowledge of a diverse and foundational intellectual tradition.

Requirements

Majors in French must have completed two years of college work or the equivalent before beginning core courses. The French major consists of at least 31 credits above the intermediate level. Elementary French language courses (FR 0101 and FR 0102) do not count toward the major. Required credits follow.

- FR 0220 - FRANCE IN THE 21ST CENTURY
- FR 0221 - READING FRENCH: LITERATURE, MEDIA, CULTURE
- FR 0227 - THE FRENCH ATLANTIC
- FR 0255 - SPEAKING FRENCH: ATELIER D'EXPRESSION ORALE
- FR 0256 - WRITING FRENCH: ATELIER D'EXPRESSION ECRITE
- FR 0258 - ADVANCED FRENCH CONVERSATION

Note

Majors are expected to take one credit of FR 0258 - ADVANCED FRENCH CONVERSATION, but they may take two additional credits of the course as a nonmajor elective.

Additional requirements

In addition to the basic requirements, the following criteria must be met by French majors:

- Once the basic requirements are met, students will, in consultation with their advisor, design a program that corresponds to their needs, but they must take an additional 15 credits at the 1000 level. Twelve credits must be in courses taught in French. Intermediate language courses (FR 0003 and FR 0004) may be used to fulfill this requirement.
- French majors may take one course above 0004, in addition to 0058, on an S/NC option.
- Although study abroad is not a requirement for the major in French, students are strongly encouraged to consider participating in a study-abroad program in a French-speaking country during their undergraduate career.
- Students must complete at least one W course within the major.

The Dietrich School requires 12 credits in a related area to be chosen in consultation with the program advisor. This requirement can also be met by completing an official minor in another area.

French and Italian Major Requirements

The following requirements apply to French, Italian, and Italian Studies majors:

- Students are required to maintain at least a 2.00 GPA in major courses.
- Reading competency in at least one other language is recommended for students interested in graduate school.
- To earn departmental honors, students must major in French, Italian, or Italian Studies; demonstrate superior performance in departmental courses; and be enrolled in 1000-level French/Italian courses no later than the first term of the junior year. Selection of honors candidates takes place only in the second term of the junior year. During the senior year, two appropriate sequential courses are chosen in consultation with the major advisor, and a research paper must be completed. The paper must be defended before a faculty committee. Honors will be determined by the quality of the paper and the defense, as well as the cumulative grades in all departmental courses counting toward the major.

Italian Studies, BA

French and Italian Major Requirements

The following requirements apply to French, Italian, and Italian Studies majors:

- Students are required to maintain at least a 2.00 GPA in major courses.
- Reading competency in at least one other language is recommended for students interested in graduate school.
- To earn departmental honors, students must major in French, Italian, or Italian Studies; demonstrate superior performance in departmental courses; and be enrolled in 1000-level French/Italian courses no later than the first term of the junior year. Selection of honors candidates takes place only in the second term of the junior year. During the senior year, two appropriate sequential courses are chosen in consultation with the major advisor, and a research paper must be completed. The paper must be defended before a faculty committee. Honors will be determined by the quality of the paper and the defense, as well as the cumulative grades in all departmental courses counting toward the major.

Requirements

The Italian Studies major promotes the cross-discipline exploration of a variety of areas relating to Italian and Italian American culture: language, literature, theatre, cinema, art and architecture, music, history, social and immigration history, politics and political theory. Students can combine a major in Italian Studies with a second major in a field such as political science, history, anthropology, history of art and architecture, music, English, business, linguistics or another foreign language.

After one term of college instruction in the Italian language (ITAL 0101 - ITALIAN LANGUAGE AND CULTURE 1 or equivalent as determined by placement testing), students may enroll in ITAL 0102 - ITALIAN LANGUAGE AND CULTURE 2 for credit toward the major.

This major requires 36 credits for completion. ITAL 0101 does not count toward the major.

Core courses

- ITAL 0081 - MADE IN ITALY:INGENUITY, SINGULARITY, STYLE
- ITAL 0102 - ITALIAN LANGUAGE AND CULTURE 2
- ITAL 0103 - ITALIAN LANGUAGE AND CULTURE 3
- ITAL 0115 - PERFORMING ITALIAN
- ITAL 0117 - ITALIES

Note

Because ITAL 0081 is taught in English and has no prerequisites, the department recommends that students interested in majoring in Italian take this course as early in their studies as possible.

Additional Requirements

Students must complete five courses in addition to the core courses listed above. At least three of these additional courses must be at the 1000-level, and at least two of these courses must be offered by the Italian program. The remaining courses can be selected from a list of approved offerings in other departments, chosen in consultation with the major advisor. Italian Studies majors are encouraged to continue their study of the Italian langugae to the greatest extent possible.

At least one of the 1000-level courses must be a writing-intensive course taught in Italian. The following courses meet this requirement.

- ITAL 1032 - INTRODUCTION TO ITALIAN LINGUISTICS
- ITAL 1041 - ITALIAN THEATRICAL WORKSHOP
- ITAL 1065 - SONGS OF THE ITALIAN SELF: ITALIAN LYRIC POETRY
- ITAL 1080 - MASTERPIECES OF ITALIAN PROSE
- ITAL 1083 - MODERN ITALIAN LITERATURE

Capstone course

Students must complete a 1-credit capstone course. The details of the capstone experience should be determined in consultation with the major advisor.

Italian, BA

French and Italian Major Requirements

The following requirements apply to French, Italian, and Italian Studies majors:

- Students are required to maintain at least a 2.00 GPA in major courses.
- Reading competency in at least one other language is recommended for students interested in graduate school.
- To earn departmental honors, students must major in French, Italian, or Italian Studies; demonstrate superior performance in departmental courses; and be enrolled in 1000-level French/Italian courses no later than the first term of the junior year. Selection of honors candidates takes place only in the second term of the junior year. During the senior year, two appropriate sequential courses are chosen in consultation with the major advisor, and a research paper must be completed. The paper must be defended before a faculty committee. Honors will be determined by the quality of the paper and the defense, as well as the cumulative grades in all departmental courses counting toward the major.

Requirements

Ater one term of college instruction in the Italian language (ITAL 0101 - ITALIAN LANGUAGE AND CULTURE 1 or equivalent, as determined by placement test results), students may enroll in ITAL 0102 - ITALIAN LANGUAGE AND CULTURE 2 for credit toward the Italian major.

This major requires 36 credits for completion. ITAL 0101 does not count toward the major.

- ITAL 0081 - MADE IN ITALY:INGENUITY, SINGULARITY, STYLE
- ITAL 0102 - ITALIAN LANGUAGE AND CULTURE 2
- ITAL 0103 - ITALIAN LANGUAGE AND CULTURE 3
- ITAL 0115 - PERFORMING ITALIAN
- ITAL 0117 - ITALIES

Note

Because ITAL 0081 is taught in English and has no prerequisites, the department recommends that students interested in majoring in Italian take this course as early in their studies as possible.

Additional Requirements

Students must complete five courses in addition to the core courses listed above. At least three of these additional courses must be at the 1000-level and be taught in Italian.

1. Courses in the ITAL 1030 to ITAL 1068 range are taught in Italian regularly.
2. Some lower-level courses and upper-level courses in the ITAL 1070 to ITAL 1092 range are taught in English regularly.
3. At least one of the 1000-level courses must be a writing-intensive course taught in Italian. The following courses meet this requirement.

- ITAL 1032 - INTRODUCTION TO ITALIAN LINGUISTICS
- ITAL 1041 - ITALIAN THEATRICAL WORKSHOP
- ITAL 1065 - SONGS OF THE ITALIAN SELF: ITALIAN LYRIC POETRY
- ITAL 1080 - MASTERPIECES OF ITALIAN PROSE
- ITAL 1083 - MODERN ITALIAN LITERATURE

Capstone course

Students must complete a 1-credit capstone course. The details of the capstone experience should be determined in consultation with the major advisor.

Minor

French Minor - French Language and Literature track

French and Italian minor requirements

The Department of French and Italian Languages and Literatures offers three tracks within its minor offerings: French Language and Literature; French Studies; and Italian. Students must apply for any official minor they will complete or have completed by the time they apply for graduation.

Students pursuing a minor offered by the Department of French and Italian Languages and Literatures may not take any courses on the Satisfactory/No Credit (S/NC) basis.

Requirements

Students can complete the minor in French with five courses chosen from the following list. Only one of the courses may be taught in English. Students whose programs will include two or more courses taught in English should declare the French Studies minor.

In addition to the listed courses, students may also take courses on literary, cultural, or linguistic topics taught in French. These courses include FR 1001 through FR 1076.

- FR 0103 - INTERMEDIATE FRENCH 1
- FR 0104 - INTERMEDIATE FRENCH 2: FRENCH IN A GLOBAL CONTEXT
- FR 0006 - SPECIAL TOPICS IN CONVERSATION AND CULTURE
- FR 0012 - FRENCH KISS: LOVE, SEX, FRANCE
- FR 0014 - INTRODUCTION TO FRENCH-SPEAKING CANADA
- FR 0016 - HISTORY OF FRENCH CINEMA
- FR 0220 - FRANCE IN THE 21ST CENTURY
- FR 0221 - READING FRENCH: LITERATURE, MEDIA, CULTURE
- FR 0227 - THE FRENCH ATLANTIC
- FR 0255 - SPEAKING FRENCH: ATELIER D'EXPRESSION ORALE
- FR 0256 - WRITING FRENCH: ATELIER D'EXPRESSION ECRITE
- FR 0080 - MODERN FRENCH NOVEL
- FR 1085 - WOMEN'S VOICES IN FRENCH LITERATURE
- FR 1088 - SPECIAL TOPICS

French Minor - French Studies track

French and Italian minor requirements

The Department of French and Italian Languages and Literatures offers three tracks within its minor offerings: French Language and Literature; French Studies; and Italian. Students must apply for any official minor they will complete or have completed by the time they apply for graduation.

Students pursuing a minor offered by the Department of French and Italian Languages and Literatures may not take any courses on the Satisfactory/No Credit (S/NC) basis.

Requirements

Students can complete the French Studies track in the French minor with five courses chosen from the following list.

In addition to the listed courses, students may also take courses on literary, cultural, or linguistic topics taught in English or French. These courses include FR 1001 through FR 1090.

- FR 0103 - INTERMEDIATE FRENCH 1
- FR 0104 - INTERMEDIATE FRENCH 2: FRENCH IN A GLOBAL CONTEXT
- FR 0006 - SPECIAL TOPICS IN CONVERSATION AND CULTURE
- FR 0012 - FRENCH KISS: LOVE, SEX, FRANCE
- FR 0014 - INTRODUCTION TO FRENCH-SPEAKING CANADA
- FR 0220 - FRANCE IN THE 21ST CENTURY
- FR 0221 - READING FRENCH: LITERATURE, MEDIA, CULTURE
- FR 0227 - THE FRENCH ATLANTIC
- FR 0255 - SPEAKING FRENCH: ATELIER D'EXPRESSION ORALE
- FR 0256 - WRITING FRENCH: ATELIER D'EXPRESSION ECRITE
- FR 0080 - MODERN FRENCH NOVEL

Italian Minor

Students may take any combination of five Italian (ITAL) courses to complete this minor. Each course must be at least three credis and must be taught on the Pittsburgh campus or through a Pitt in Italy program. Students minoring in Italian are encouraged to study the target language to the greatest extent allowed by their majors.

French and Italian minor requirements

The Department of French and Italian Languages and Literatures offers three tracks within its minor offerings: French Language and Literature; French Studies; and Italian. Students must apply for any official minor they will complete or have completed by the time they apply for graduation.

Students pursuing a minor offered by the Department of French and Italian Languages and Literatures may not take any courses on the Satisfactory/No Credit (S/NC) basis.

Certificate

Medieval and Renaissance Studies Certificate

In spite of change through the centuries and variations of a regional and national character, the millennium preceding the deaths of Shakespeare and Cervantes in 1616 is marked by a coherence sufficient to justify considering it as a cultural entity, worthy of study for its humanistic qualities and for its importance in preparing the modern world. Some of the principal aims of the Medieval and Renaissance Studies Program are:

- to identify and explore aspects of medieval and Renaissance cultures that are an important part of our own cultural heritage;
- to promote an understanding of our medieval and Renaissance ancestors through the investigation of the ways they faced the issues of their day, asked questions of their institutions, and were conscious of themselves and the world around them;
- to help students understand historical relativity by showing them how different periods and individuals have understood the Middle Ages and Renaissance in very different ways; and
- to provide the basis for an open-minded attitude toward any culture that is different from our own.

In consultation with a program advisor (who may be a member of the Executive Committee, one of the departmental representatives, or another faculty member specializing in the area), the candidate will define an area of interest and organize a program of courses in relation to it. In designing a certificate program, students are urged to keep in mind the aims of the program as described above. For more information, see http://www.medren.pitt.edu/.

Requirements

The certificate requires 15 credits. At least nine credits will be earned in 1000-level courses.

- One of the five courses must be focused on the medieval period; see the list of qualifying courses at www.medren.pitt.edu/undergraduate-certificates/overview.php
- One of the five courses must be focused on the Renaissance period; see the list of qualifying courses at www.medren.pitt.edu/undergraduate-certificates/overview.php

The student must take at least two courses from each category. Courses should not be chosen at random but should follow a pattern of interrelated studies worked out with a Program Advisor from one of the cooperating Departments or with the Director of Medieval and Renaissance Studies. The categories are:

- language and literature, the visual arts, and music; and
- social, intellectual, economic, and ideological history (including philosophy, religious studies, the history of science and the study of institutions).

A strong recommendation, beyond these requirements, is that certificate candidates acquire a reading knowledge of a modern European language as early as possible. In addition, Latin is suggested for those who plan to do graduate work in the field.

Gender, Sexuality, and Women's Studies Program

The Gender, Sexuality, and Women's Studies program at the University of Pittsburgh is an interdisciplinary academic program that is committed to promoting feminist and LGBTQIA activism, pedagogy, and scholarship that engage with the larger local, national, and global communities. Program offerings provide opportunities for students and faculty to explore the historical development, cultural variations, and changing representations of gender and sexuality as they organize identities, interactions, and institutions and intersect in complex ways with sex, race, class, ethnicity, ability, age, religion, and nation.

Bachelor Degree in Gender, Sexuality, and Women's Studies

The goals of this major are: to educate undergraduate students in the analysis and understanding of gender as a knowledge base and critical lens through which to read critically; to write and conduct research in disciplinary and interdisciplinary contexts; to begin to connect academic work with broader community interests; and to prepare students for graduate school and professional lives. The interdisciplinary nature of this major makes it ideal for students who wish to add breadth and depth to their studies in other disciplines.

Certificate in Gender, Sexuality, and Women's Studies

Students who pursue this certificate are those who plan careers in medicine, the creative arts, social work, education, counseling, law, therapy, academia, and business find that this program's courses enhance their professional activities. Still others report that the confidence and insight that they acquire in such courses enriches their lives regardless of their particular career goals. For more information, please visit the Gender, Sexuality, and Women's Studies Program in 401 Cathedral of Learning or online at www.gsws.pitt.edu.

Major

Gender, Sexuality, and Women's Studies, BA

Major Requirements

The goals of this major are: to educate undergraduate students in the analysis and understanding of gender as a knowledge base and critical lens through which to read critically; to write and conduct research in disciplinary and interdisciplinary contexts; to begin to connect academic work with broader community interests; and to prepare students for graduate school and professional lives. The interdisciplinary nature of this major makes it ideal for students who wish to add breadth and depth to their studies in other disciplines. This major requires 30 credits, distributed as follows.

Core courses

- GSWS 0100 - INTRODUCTION TO GENDER, SEXUALITY, AND WOMEN'S STUDIES
- GSWS 0500 - INTRODUCTION TO FEMINIST THEORY
- GSWS 0550 - SEX AND SEXUALITIES

Two elective courses

choose one from each of the following groups

Group A

- GSWS 0200 - SEX, RACE, AND POPULAR CULTURE
- GSWS 0210 - WIRED WOMEN
- GSWS 0220 - CONTEMPORARY ISSUES AND ARGUMENTS

Group B

- AFRCNA 0454 - MAN/WOMAN LITERATURE
- ANTH 0768 - HUMAN SEXUALITY IN CROSS CULTURE
- ENGCMP 0203 - SEMINAR IN COMPOSITION: GENDER STUDIES
- ENGLIT 0610 - WOMEN AND LITERATURE
- ENGLIT 0630 - SEXUALITY AND REPRESENTATION
- FR 0012 - FRENCH KISS: LOVE, SEX, FRANCE
- GSWS 1140 - SPECIAL TOPICS
  - Pitt in China, Pitt in London, etc.
- GSWS 1900 - INTERNSHIP (junior or senior only)
- PSY 0184 - PSYCHOLOGY OF GENDER

- SOC 0436 - SOCIAL ASPECTS OF SEXUALITY
- SOC 0446 - SOCIOLOGY OF GENDER
- Any course officially cross-listed with GSWS (check course offerings each semester for options)

Four upper-level courses

choose two from each group

Group A

- GSWS 1140 - SPECIAL TOPICS
- GSWS 1150 - TRANSNATIONAL FEMINISMS
- GSWS 1170 - QUEER THEORY
- GSWS 1180 - POLITICS OF GENDER AND FOOD
- GSWS 1190 - MASCULINITIES
- GSWS 1450 - GENDER AND SUSTAINABILITY

Group B

- ADMJ 1242 - GENDER, RACE, CLASS, AND CRIME
- AFRCNA 1309 - WOMEN OF AFRICAN AND AFRICAN DIASPORA
- ANTH 1738 - GENDER PERSPECTIVES IN ANTHROPOLOGY
- COMMRC 1148 - RHETORIC AND HUMAN RIGHTS
- COMMRC 1160 - VISUAL RHETORIC
- ENGFLM 1703 - GENDER AND FILM
- ENGLIT 1704 - WOMEN NOVELISTS
- FR 1085 - WOMEN'S VOICES IN FRENCH LITERATURE
- HIST 1560 - WOMEN IN LATIN AMERICAN HISTORY
- LEGLST 1315 - SEX, LAW AND MARRIAGE
- MUSIC 1398 - WOMEN & MUSIC CROSS-CULTL PERSP
- PS 1622 - FEMINIST POLITICAL THOUGHT
- PSY 1110 - PSYCHOLOGICAL ASPECTS OF HUMAN SEXUALITY
- SOC 1413 - MARRIAGE
- SOC 1448 - WORKING WOMEN
- Any 1000-level course officially cross-listed with GSWS (check course offerings each semester for options)

Capstone

- GSWS 1910 - CAPSTONE

Grade requirements

A minimum GPA of 2.0 is required in those courses that count toward the major. Students must also have a minimum GPA of 2.0 in all GSWS courses. Students may have no more than six credits overlap with another major or certificate.

Writing (W) requirement

Students must complete at least one writing-intensive (W) course with the GSWS subject designation. Check the Course Descriptions Web site (www.courses.as.pitt.edu) each term for writing-intensive course options.

Minor

LGBTQ and Critical Sexuality Studies Minor

The minor in LGBTQ and Critical Sexuality Studies builds students' knowledge of theory and an understanding of sexuality and its history, tracing the movement of sexual regulation through different domains (religious, legal, medical, social, and political). This minor requires 18 credits of coursework for completion, detailed as follows.

Core courses

Both of the following courses are required for the major.

- GSWS 0230 - INTRODUCTION TO LGBTQ STUDIES
- GSWS 0550 - SEX AND SEXUALITIES

Upper level courses

Students must choose one of the following courses. They may take the remaining two as electives, with the addition elective credits chosen from the elective course list.

- GSWS 1140 - SPECIAL TOPICS
- GSWS 1170 - QUEER THEORY
- GSWS 1280 - TRANSNATIONAL SEXUAL POLITICS

Elective courses

Students must choose three of the following courses.

- ANTH 0768 - HUMAN SEXUALITY IN CROSS CULTURE
- COMMRC 1143 - KNOWLEDGE, POWER, AND DESIRE
- ENGLIT 0630 - SEXUALITY AND REPRESENTATION
- ENGLIT 0670 - QUEER AND TRANSGENDER LITERATURE
- FR 0012 - FRENCH KISS: LOVE, SEX, FRANCE
- GSWS 0600 - GLOBAL LGBTQ LITERATURE
- GSWS 0610 - QUEER AND FEMINIST MEDIA ART
- GSWS 1910 - CAPSTONE
- GSWS 1140 - SPECIAL TOPICS
- GSWS 1170 - QUEER THEORY
- GSWS 1280 - TRANSNATIONAL SEXUAL POLITICS
- HIST 1026 - STATES AND SEX IN THE AMERICAS
- HIST 1692 - LGBTQ IN THE USA, 1900-PRESENT
- MUSIC 1396 - MUSIC IN SOCIETY
- PSY 1110 - PSYCHOLOGICAL ASPECTS OF HUMAN SEXUALITY
- RELGST 1405 - RELIGION AND SEXUALITY
- SOC 0436 - SOCIAL ASPECTS OF SEXUALITY
- SOC 1416 - SEX GENDER SEXUALITY AND THE BRAIN SCIENCES
- SPAN 1423 - SEXUAL DIVERSITY IN LATIN AMERICAN LITERATURE AND CULTURE

Certificate

Gender, Sexuality, and Women's Studies Certificate (Suspended)

This program is no longer active and accepting student applications, effective Fall 2016. Students currently enrolled in the certificate will either transfer to the new minor or complete the certificate by the end of Spring 2023.

The Gender, Sexuality, and Women's Studies program is an interdisciplinary academic program focusing on gender, sexuality, and women. Gender, Sexuality, and Women's Studies (GSWS) courses and cross-listed courses in various departments across the university provide opportunities for all students to broaden their understandings of the changing role of gender in the United States and globally. Students who want to explore the intersection of gender with race, class, ethnicity, nation, religion, ability, age, sex and sexuality will find courses of interest, as will students who want to know more about the role of women in history, in literature and the arts, in media and science. Students who plan careers in medicine, the creative arts, social work, education, counseling, law, therapy, academia, and business find that this program's courses enhance their professional activities. Still others report that the confidence and insight that they acquire in such courses enriches their lives regardless of their particular career goals. For more information, please visit the Gender, Sexuality, and Women's Studies Program in 401 Cathedral of Learning or online at www.gsws.pitt.edu.

Requirements

Please consult the Gender, Sexuality and Women's Studies Undergraduate Advisor to plan your program of study.

A minimum of 18-credits, completed with an overall GPA of 2.00 is required, as follows:

- GSWS 0100 - INTRODUCTION TO GENDER, SEXUALITY, AND WOMEN'S STUDIES
- One of the following, though students are encouraged to take both courses
- GSWS 0500 - INTRODUCTION TO FEMINIST THEORY
- GSWS 0550 - SEX AND SEXUALITIES
- Three elective courses from at least two different academic departments. GSWS may count as one of these programs. Courses must be approved for GSWS credit; consult the Course Descriptions Web site, www.courses.as.pitt.edu, for current listings
- At least one 1000-level course with a GSWS subject; a cross-listed course **will not** fulfill this requirement.

Department of Geology and Environmental Science

The Department of Geology and Planetary Science studies the Earth and how it works. The earth is a fascinating natural system that supports many interactions between the solid earth, oceans, atmosphere, life, and various solar system objects. The primary goal of our geology and environmental geology majors (both BS programs) is a scientific understanding of these natural systems and their significant and sometimes surprising variations over geologic time. In addition, these students often seek a solid scientific grounding in earth resources and environmental problems. Our popular environmental studies major (a BA program) focuses on the economic, political, and legal issues that conspire to either cause or prevent the solution of environmental problems. Our programs are popular with people who love nature, who want to understand how the earth works, and who want to understand the many dimensions of modern environmental issues. For more information on our programs, please visit www.geology.pitt.edu.

Major

Environmental Science, BS

Environmental Science aims to understand every aspect of modern and ancient Earth. A degree in environmental science provides the diverse skills required to work in many different employment settings. For example, the acquired scientific and mapping skills are great for jobs in parks and forestry management, museum work, science education, urban and suburban planning, and jobs that involve natural resource issues. Within the field of geology, environmental and geotechnical jobs exist for people with BS degrees. A master's degree provides better job opportunities in those fields, as well as in oil and gas exploration, which can be enormously rewarding both intellectually and financially. A PhD provides additional employment options, especially in universities and government labs. Internships enable students to meet potential employers, learn about real world opportunities, and sample different types of work.

Geology deploys an interdisciplinary mix of physics, chemistry, biology, math, and natural science to understand the mysteries of nature. It focuses on the solid Earth (rocks, minerals, mountain belts, volcanoes, earthquakes, sedimentary basins, oil and gas deposits, etc.) as well as the history of life (paleontology) and its impact on the Earth. In recent decades, geologists have become increasingly concerned with the history of the Earth's climate, how the physical and chemical behavior of the oceans has changed over time, and how drifting continents and evolving life have interacted to control the composition of the atmosphere and oceans and hence to control global climate. Geologists also examine how human activities affect our environment, including the quality of air, water, and soil.

Geology majors have hiked the Appalachian Trail, gone backpack camping with at-risk youth in the Utah deserts, bicycled across North America, plumbed the depts. Of unexplored caves, and traveled to Mongolia in pursuit of summer research. Geology majors take a six week summer field camp that features extensive hiking in the western U.S., Italy, New Zealand, or other places around the world. To see whether environmental science is a good major for you try a geology class (GEOL 0040 , GEOL 0800, or GEOL 0860) and the Physical Geology Lab (GEOL 0055). Make sure you are comfortable with the required biology, chemistry, math, and physics courses.

The Environmental Science major requires completion of at least 63 credits, as follows.

Core courses required for the major

Core courses

The following two courses should be taken in the same academic term.

- GEOL 0055 - GEOLOGY LABORATORY
- GEOL 0840 - ENVIRONMENTAL SCIENCE

All of the following courses

- GEOL 1015 - GEOLOGY COLLOQUIUM
- GEOL 1030 - THE ATMOSPHERE, OCEANS AND CLIMATE
- GEOL 1050 - SURFACE WATER HYDROLOGY or
- GEOL 1051 - GROUNDWATER GEOLOGY
- GEOL 1060 - GEOMORPHOLOGY
- GEOL 1445 - GIS, GPS, AND COMPUTER METHODS
- GEOL 1515 - ENVIRONMENTAL GEOCHEMISTRY
- GEOL 1641 - ECOSYSTEM ECOLOGY

One of the following capstone courses

- GEOL 1903 - UNDERGRADUATE RESEARCH
- GEOL 1910 - UNDERGRADUATE THESIS
- GEOL 1960 - FIELD CAMP

Co-requirements for the major

All of the following courses

- CHEM 0110 - GENERAL CHEMISTRY 1
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)

Three of the following courses

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
  And one of these associated lab courses:
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1
- BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
  And one of these associated lab courses:
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2
- BIOSC 0068 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 2
- CHEM 0120 - GENERAL CHEMISTRY 2
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)
- STAT 1000 - APPLIED STATISTICAL METHODS

Geology electives

Students must complete nine credits of GEOL at the 1000 level or above. A list of eligible courses follows. Courses indicated by an asterisk (*) are recommended for Environmental Science majors.

- GEOL 0060 - HISTORY OF THE EARTH
- GEOL 1001 - MINERALOGY
- GEOL 1003 - IGNEOUS & METAMORPHIC PETROLOGY
- GEOL 1020 - SEDIMENTOLOGY AND STRATIGRAPHY
- GEOL 1052 - PALEOCLIMATOLOGY
- GEOL 1055 - ENVIRONMENTAL ETHICS
- GEOL 1056 - UHC ENVIRONMENTAL ETHICS, SCIENCE AND PUBLIC POLICY
- GEOL 1100 - STRUCTURAL GEOLOGY
- GEOL 1240 - VERTEBRATE PALEONTOLOGY
- GEOL 1313 - COM ENVIRONMENTAL PROFESSIONALS
- GEOL 1331 - HEALTH AND SAFETY (HAZWOPER)
- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1446 - ADVANCED GEOGRAPHICAL INFORMATION SYSTEM
- GEOL 1460 - INTRODUCTION TO REMOTE SENSING
- GEOL 1701 - GEOLOGY OF THE PLANETS
- GEOL 1900 - INTERNSHIP
- GEOL 1901 - INDEPENDENT STUDY
- GEOL 1903 - UNDERGRADUATE RESEARCH
- GEOL 1904 - DIRECTED READING
- GEOL 1XXX Other upper-level class in GEOL, approved by the major advisor
- GEOL 2054 - SOILS: GEOBIOCHEMICAL LANDSCAPES
- GEOL 2525 - STABLE ISOTOPE GEOCHEMISTRY
- GEOL 2853 - WATERSHED HYDROLOGY AND BIOGEOCHEMISTRY
- GEOL 2XXX Graduate level GEOL class, instructor permission required

Geology additional requirements

Grades: Students must maintain a minimum GPA of 2.0 in departmental courses to graduate with a BS degree in Environmental Science

Satisfactory/No Credit: No GEOL course that counts toward the major can be taken on an S/NC basis. No more than two of the non-geological science courses that count toward the major may be taken on an S/NC basis.

Writing requirement: Students must complete at least one writing-intensive (W) course in the major.

Environmental Studies, BA

Rapid growth in human population and development has led to complex environmental problems on local and global scales. The way in which we address these issues will have a profound effect on our society and planet in the coming century. Enlightened solutions require a strong component of scientific knowledge and an awareness of the relevant societal issues. A major in environmental studies will equip students with an understanding of earth systems and the environment, including the role of geologic processes on human activity and the impact of humans on the biosphere, atmosphere, hydrosphere, and global climate. Courses in the natural and social sciences supplement a traditional liberal arts curriculum to provide a comprehensive, interdisciplinary background in the scientific, economic, political, and social aspects of human interaction with the environment.

The environmental studies major provides a strong background for students who seek careers in fields such as resource development and management, environmental policy and regulation, risk assessment, land use planning, public policy, and education. Potential employers include local, state, or federal government organizations; consulting firms; or companies that are affected by environmental issues or regulations. Graduates of the Environmental Studies Program can also pursue postgraduate study in fields such as business, law, medicine, public policy, education, international relations, urban and regional planning, environmental management, and public health.

Major Requirements

The major consists of core courses, co-requirements, and electives. The core courses provide a fundamental understanding of environmental processes, issues, and policy and culminate in an environmental science field course and an interdisciplinary capstone course on science and public

policy. The co-requirements provide the necessary background for advanced study. Majors are encouraged to undertake an independent research project, internship, or senior thesis.

Core Geology courses

- GEOL 0055 - GEOLOGY LABORATORY
- GEOL 0840 - ENVIRONMENTAL SCIENCE
- GEOL 1030 - THE ATMOSPHERE, OCEANS AND CLIMATE
- GEOL 1313 - COM ENVIRONMENTAL PROFESSIONALS (writing course)
- GEOL 1333 - SUSTAINABILITY
- GEOL 1445 - GIS, GPS, AND COMPUTER METHODS

Legal Studies course

One of the following courses.

- GEOL 1312 - ENVIRONMENTAL LAW AND POLICY
- LEGLST 1320 - LAW AND ENVIRONMENT

One of the following Economics courses

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- ECON 0800 - INTRODUCTION TO ECONOMICS

One of the following Reasoning courses

- HPS 0611 - PRINCIPLES OF SCIENTIFIC REASONING
  or
  EOH 2180 Introduction to Risk Sciences **and** EOH 2181 Risk Assessment Practicum

One of the following Public Policy courses

- GEOL 1055 - ENVIRONMENTAL ETHICS
- GEOL 1056 - UHC ENVIRONMENTAL ETHICS, SCIENCE AND PUBLIC POLICY

Environmental field coursework

At least two credits in the following courses.

- GEOL 1930 - YELLOWSTONE FIELD CLASS
- GEOL 1950 - WYOMING FIELD STUDIES IN ECOLOGY AND PALEONTOLOGY
- BIOSC 1140 - BEHAVIORAL ECOLOGY
- BIOSC 1170 - FRESHWATER ECOLOGY
- BIOSC 1180 - ECOLOGY OF AMPHIBIANS AND REPTILES
- BIOSC 1190 - AQUATIC ENTOMOLOGY
- BIOSC 1230 - ORNITHOLOGY
- BIOSC 1330 - FIELD BOTANY
- BIOSC 1390 - FIELD TECHNIQUES IN ECOLOGY AND CONSERVATION
- BIOSC 1400 - DISEASE ECOLOGY
- BIOSC 1420 - WILDLIFE MANAGEMENT
- BIOSC 1610 - CONSERVATION BIOLOGY

Field course note

This requirement can be satisfied by taking any BIOSC course offered at the Pymatuning Ecology Laboratory or an approved environmental science field course offered through an outside institution. In either case, the substituted course must have a credit value of not less than two credits.

Environmental Internship course

- GEOL 1900 - INTERNSHIP

Co-requirements

- CHEM 0110 - GENERAL CHEMISTRY 1

One of the following Mathematics courses

- MATH 0125 - CALCULUS FOR BUSINESS 1 and
- MATH 0126 - CALCULUS FOR BUSINESS 2

- MATH 0120 - BUSINESS CALCULUS
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- PUBSRV 1110 - FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR
- PUBSRV 1210 - FINANCIAL MANAGEMENT OF NON-PROFIT ORGANIZATIONS

One of the following Statistics courses

- STAT 0200 - BASIC APPLIED STATISTICS
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

Twelve credits of electives in Social Science and Humanities

Students must complete 12 credits in social science and/or humanities courses from the following lists.

Anthropology courses

- ANTH 0582 - INTRODUCTION TO ARCHEOLOGY
- ANTH 0601 - PHYSICAL ANTHROPOLOGY: OVERVIEW
- ANTH 0680 - INTRODUCTION TO PHYSICAL ANTHROPOLOGY
- ANTH 0681 - INTRODUCTION TO HUMAN EVOLUTION
- ANTH 0780 - INTRODUCTION TO CULTURAL ANTHROPOLOGY
- ANTH 1524 - CHINESE ARCHAEOLOGY
- ANTH 1528 - SOUTH AMERICAN ARCHAEOLOGY
- ANTH 1541 - CULTURAL RESOURCE MANAGEMENT
- ANTH 1762 - HUMAN ECOLOGY
- ANTH 1763 - FIELD METHODS

Communication courses

- COMMRC 1149 - ENVIRONMENTAL RHETORIC

Economics courses

- ECON 0360 - INTRODUCTION TO ENVIRONMENT AND RESOURCE ECONOMICS
- ECON 0500 - INTRODUCTION TO INTERNATIONAL ECONOMICS
- ECON 0530 - INTRODUCTION TO DEVELOPMENT ECONOMICS
- ECON 1360 - ENVIRONMENTAL ECONOMICS

English Literature courses

- ENGLIT 0710 - CONTEMPORARY ENVIRONMENTAL LITERATURE
- ENGLIT 0812 - MEDIA/ECOLOGY
- ENGLIT 1005 - LITERATURE AND THE ENVIRONMENT

History courses

- HIST 0700 - WORLD HISTORY
- HIST 1668 - HISTORY OF PITTSBURGH
- HIST 1669 - HISTORY OF BLACK PITTSBURGH
- HIST 1695 - ENVIRONMENTAL HISTORY

History and Philosophy of Science courses

- HPS 0608 - PHILOSOPHY AND SCIENCE
- HPS 0610 - CAUSAL REASONING
- HPS 0620 - SCIENCE AND RELIGION
- HPS 0621 - PROBLEM SOLVING: HOW SCIENCE WORKS
- HPS 1653 - INTRO TO PHILOSOPHY OF SCIENCE

History of Art and Architecture courses

- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT

Political Science courses

- PS 1232 - POLITICAL ATTITDE & PUBLIC OPIN
- PS 1235 - MEDIA AND POLITICS
- PS 1261 - AMERICAN PUBLIC POLICY
- PS 1538 - THE POLITICS OF OIL AND NATURAL RESOURCES
- PS 1542 - GLOBAL ENVIRONMENTAL POLITICS
- PS 1543 - GLOBALIZATION AND INTERNATIONAL POLITICS

Religious Studies courses

- RELGST 1518 - RELIGION AND ECOLOGY
- RELGST 1519 - RELIGION, NATURE AND ENVIRONMENT
- RELGST 0770 - SCIENCE AND RELIGION

Sociology courses

- SOC 0230 - SOCIAL RESEARCH METHODS
- SOC 0312 - SCIENCE IN SOCIETY
- SOC 1440 - EXPERIENCING GLOBALIZATION
- SOC 1445 - SOCIETY AND ENVIRONMENT

Urban Studies courses

- URBNST 0080 - INTRODUCTION TO URBAN STUDIES
- URBNST 1102 - INTRODUCTION TO GIS
- URBNST 1104 - APPLIED GIS
- URBNST 1300 - URBAN SKILLS SEMINAR
- URBNST 1614 - URBAN SUSTAINABILITY

- URBNST 1700 - INTERNATIONAL URBANISM SEMINAR

Business Administration courses

- BUSENV 1701 - ETHICAL LEADERSHIP FUNDAMENTALS
- BUSENV 1765 - LEADERSHIP IN THE SOCIAL ENVIRONMENT

Public and International Affairs courses

- PIA 2115 - ENVIRONMENTAL ECONOMICS
- PIA 2140 - FINANCIAL PRACTICES FOR ECONOMICS AND ENVIRONMENTAL SUSTAINABILITY
- PIA 2164 - NATURAL RESOURCES GOVERNANCE AND MANAGEMENT
- PIA 2388 - INTERNATIONAL LAW AND POLICY
- PIA 2502 - GLOBAL ENVIRONMENTAL POLICY
- PIA 2510 - ECONOMICS OF DEVELOPMENT
- PIA 2520 - FOOD SECURITY: AGRICULTURE & RURAL DEVELOPMENT
- PIA 2522 - GLOBAL ENERGY
- PIA 2715 - GIS FOR PUBLIC POLICY

Public Service courses

- PUBSRV 1230 - FUNDRAISING FOR NON-PROFIT ORGANIZATIONS
- PUBSRV 1300 - LEGAL ISSUES IN PUBLIC SERVICE
- PUBSRV 1310 - DIVERSITY ISSUES IN PUBLIC SERVICE
- PUBSRV 1320 - GEOGRAPHIC INFORMATION SYSTEMS IN THE PUBLIC SERVICE
- PUBSRV 1455 - LAW, ETHICS AND PUBLIC POLICY IN THE MASS MEDIA

Twelve credits of electives in the Natural Sciences and Engineering

Students must complete 12 credits in natural science and/or engineering courses from the following lists.

Students are encouraged to take BIOSC 0150 and BIOSC 0160 because they are prerequisites for the Pymatuning field courses. Students are further encouraged to take the GEOL 1300-level electives.

Biological Sciences courses

- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1 or
- BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1
- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0350 - GENETICS
- BIOSC 0370 - ECOLOGY
- BIOSC 0390 - ECOLOGY LABORATORY

Chemistry courses

- CHEM 0120 - GENERAL CHEMISTRY 2
- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0350 - PRINCIPLES OF ORGANIC CHEMISTRY

Computer Science courses

- CS 0090 - SUSTAINABILITY AND COMPUTING
- CS 0134 - WEB SITE DESIGN AND DEVELOPMENT
- CS 0334 - INTERMEDIATE WEB SITE DESIGN AND DEVELOPMENT
- CS 0590 - SOCIAL IMPLICATIONS OF COMPUTING TECHNOLOGY

Geology and Environmental Science courses

The Department of Geology and Environmental Science strongly encourages students to take listed GEOL courses in the 1300 series and GEOL 1641.

- GEOL 0060 - HISTORY OF THE EARTH
- GEOL 1001 - MINERALOGY
- GEOL 1015 - GEOLOGY COLLOQUIUM
- GEOL 1020 - SEDIMENTOLOGY AND STRATIGRAPHY
- GEOL 1051 - GROUNDWATER GEOLOGY
- GEOL 1052 - PALEOCLIMATOLOGY
- GEOL 1060 - GEOMORPHOLOGY
- GEOL 1100 - STRUCTURAL GEOLOGY
- GEOL 1330 - SUSTAINABILITY FLASH LAB
- GEOL 1331 - HEALTH AND SAFETY (HAZWOPER)
- GEOL 1332 - ENVIRONMENTAL ADVOCACY AND ACTION
- GEOL 1335 - ENVIRONMENTAL ISSUES: AIR QUALITY
- GEOL 1336 - ENVIRONMENTAL ISSUES: AIR QUALITY (W)
- GEOL 1337 - ENVIRONMENTAL ISSUES: WATER QUALITY
- GEOL 1338 - ENVIRONMENTAL ISSUES: WATER QUALITY (W)
- GEOL 1339 - ENVIRONMENTAL ISSUES: MINING AND GAS DRILLING ISSUES
- GEOL 1340 - ENVIRONMENTAL ISSUES: MINIING AND GAS DRILLING ISSUES (W)
- GEOL 1341 - ENVIRONMENTAL ISSUES: PARKS AND FORESTS
- GEOL 1342 - ENVIRONMENTAL ISSUES: PARKS AND FORESTS (W)
- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1446 - ADVANCED GEOGRAPHICAL INFORMATION SYSTEM
- GEOL 1460 - INTRODUCTION TO REMOTE SENSING
- GEOL 1510 - AQUATIC AND SEDIMENTARY GEOCHEMI
- GEOL 1515 - ENVIRONMENTAL GEOCHEMISTRY
- GEOL 1641 - ECOSYSTEM ECOLOGY
- GEOL 1701 - GEOLOGY OF THE PLANETS

Physics courses

- PHYS 0087 - PHYSICS AND SOCIETY
- PHYS 0089 - PHYSICS AND SCIENCE FICTION
- PHYS 0091 - CONCEPTUAL PHYSICS
- PHYS 0110 - INTRODUCTION TO PHYSICS 1
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)

Civil and Environmental Engineering courses

- CEE 1210 - ENGR AND SUSTAINABLE DEVELOPMENT
- CEE 1503 - INTRO TO ENVIRONMENTAL ENGRNG
- CEE 1513 - ENVIRONMENTAL ENGRNG PROCESSES
- CEE 1514 - ENVIRONMENTAL IMPACT ASSESSMENT

Other requirements

Grade requirements: A minimum GPA of 2.0 is required in those courses that count toward the major. All core courses, co-requirements, and electives must be passed with a grade of C- or better.

Satisfactory/No Credit option: There is no limit on the number of courses in the major that can be taken on an S/NC basis.

Writing (W) requirement: GEOL 1313 satisfies this requirement for Environmental Studies majors.

Geology, BS

The Geology major requires completion of 67 credits of coursework, distributed as follows.

Major Course Requirements

One of the following

- GEOL 0800 - GEOLOGY
- GEOL 0820 - NATURAL DISASTERS
- GEOL 0860 - ENVIRONMENTAL GEOLOGY

All of the following courses

- GEOL 0055 - GEOLOGY LABORATORY
- GEOL 0060 - HISTORY OF THE EARTH
- GEOL 1001 - MINERALOGY
- GEOL 1003 - IGNEOUS & METAMORPHIC PETROLOGY
- GEOL 1015 - GEOLOGY COLLOQUIUM
- GEOL 1020 - SEDIMENTOLOGY AND STRATIGRAPHY
- GEOL 1100 - STRUCTURAL GEOLOGY
- GEOL 1960 - FIELD CAMP

Geology elective courses

Students must complete three courses (nine credits) of GEOL courses at the 1000 level or above.

Corequirements

- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or
- MATH 0235 - HONORS 1 - VARIABLE CALCULUS

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

One of the following

- GEOL 1045 - STATISTICS FOR EARTH SCIENCE
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0250 - MATRIX THEORY & DIFFT EQUATIONS
- STAT 1000 - APPLIED STATISTICAL METHODS

Geology additional requirements

Grades: Students must maintain a minimum GPA of 2.0 in departmental courses to graduate with a BS degree in Environmental Science

Satisfactory/No Credit: No GEOL course that counts toward the major can be taken on an S/NC basis. No more than two of the non-geological science courses that count toward the major may be taken on an S/NC basis.

Writing requirement: Students must complete at least one writing-intensive (W) course in the major.

Certificate

Geographic Information Systems Certificate

The Geology and Planetary Science Department offers a Certificate in Geographic Information Systems (GIS). GIS is a computer-based system that accommodates virtually any type of information about features that are referenced by geographical location. For example, a GIS database may include both location and attribute data, providing a spatial visualization capability for analyzing descriptive characteristics about geographical features, both natural and manmade. One of the most important benefits of GIS analysis is the ability to spatially interrelate multiple types of information stemming from a range of sources. Such computational manipulation of geographic data has become increasingly important in many areas of science, government, and industry. Students who demonstrate experience with computers in general, and GIS/image processing in particular, are at a distinct advantage when looking for jobs in geology, environmental science, city and regional planning, and engineering. This certificate is designed to provide students with the knowledge and skills needed for immediate success in GIS-related jobs.

Requirements

The program is open to any University of Pittsburgh student, including post-baccalaureate students (professionals seeking to expand their job-related computer skills). Approximately four terms (two academic years) will be required to complete this certificate program. It is therefore suggested that undergraduates begin no later than their junior year. A grade of C or better is required in all courses for successful completion of the certificate. GIS topics covered include the nature of geographic data, map projections, raster images, the basic elements of a GIS database, sources of data, and training in the Arc/Info software package. Students also have the option of focusing on remote sensing theory and applications. Remote sensing (RS) topics include image analysis and processing; field validation of satellite and airborne datasets; GPS training; and the use of software packages such as ENVI, Erdas Imagine, ERMapper, and Trimble's Pathfinder Office.

Required core courses

- GEOL 1445 - GIS, GPS, AND COMPUTER METHODS or
- GEOL 2449 - GIS, GPS, AND COMPUTER METHODS

- GEOL 1460 - INTRODUCTION TO REMOTE SENSING

Note

Two elective courses may be chosen that have special relevance to the student's major or employment goals. Appropriate courses will be available from many different departments. Courses not on the following list may be selected contingent on approval by the certificate advisor.

Suggested elective courses

- GEOL 0820 - NATURAL DISASTERS
- GEOL 1030 - THE ATMOSPHERE, OCEANS AND CLIMATE
- GEOL 1060 - GEOMORPHOLOGY
- GEOL 1446 - ADVANCED GEOGRAPHICAL INFORMATION SYSTEM
- GEOL 1960 - FIELD CAMP
- GEOL 2460 - APPLIED REMOTE SENSNG AND GPS TECHNIQUES
- GEOL 2640 Advanced Geohazards and Risk Management
- BIOSC 1390 - FIELD TECHNIQUES IN ECOLOGY AND CONSERVATION
- INFSCI 1022 - DATABASE MANAGEMENT SYSTEMS

Independent Study

Students should work with faculty in their primary area of interest to define and develop the capstone project. It must use GIS and/or RS as a major tool and result in a published report, map, or media that describes the results of the research.

- GEOL 1901 - INDEPENDENT STUDY

Additional information and requirements

- A minimum grade of C is required in each course required for this certificate.
- No course that counts toward the certificate can be taken on an S/NC basis unless the student receives special permission from the certificate advisor.

Department of German

The study of second language and culture is a cornerstone of education in today's international world. It teaches intercultural competence by increasing students' understanding of their own backgrounds and their sensitivity for other traditions and values. Knowledge of a second language and culture brings obvious competitive advantages in careers with an international dimension. As a liberal arts discipline, the study of language improves analytic-conceptual and communication skills necessary for all professional careers. Enhanced with appropriate additional course work, a major in German serves as a foundation for professional training in such subjects as business, law, politics, and medicine, as well as the media and communication industry. Students with a BA in German compete well in nontechnical fields for jobs requiring a bachelor's degree. For more information on the major, the minor, the certificate, and the Department of Germanic Languages and Literatures, see www.german.pitt.edu.

Major

German Language and Cultural Studies, BA

Prerequisites

Students must complete the following introductory language courses.

- GER 0101 - BEGINNING GERMAN 1
- GER 0102 - BEGINNING GERMAN 2

Requirements

The German Language and Cultural Studies major requires completion of 33 to 35 credits distributed as follows. If necessary to fulfill credit requirements, higher-level language courses can be substituted for GER 0201 through GER 0204..

Required language courses

Choose one of the following pairs of courses.

- GER 0201 - INTERMEDIATE GERMAN 1
- GER 0202 - INTERMEDIATE GERMAN 2

- GER 0203 - INTENSIVE INTERMEDIATE GERMAN 1
- GER 0204 - INTENSIVE INTERMEDIATE GERMAN 2

Required writing-intensive course

Students must complete one of the following writing-intensive courses.

- GER 1001 - GERMAN WRITING
- GER 1003 - PROFESSIONAL GERMAN

1000-level course

Students must complete one course at the 1000-level.

Literary analysis course

- GER 1105 - LITERARY ANALYSIS

1100-level courses

Students must complete two courses at the 1100-level.

1200- to 1400-level course

Students must complete one seminar in German at the 1200- to 1400-level.

Additional coursework

Students must complete two additional courses in any of the following groups.

- Any seminar in German at the 1200- to 1400-level.
- A 1500-level course in the Department of German, with some work in German to be arranged with the instructor
- German studies courses in other deparments that include a 1-credit trailer in German.

Capstone course

Students should take the capstone seminar in the fall term of their senior year.

- GER 1399 - SENIOR CAPSTONE SEMINAR

Additional requirements

Grade requirements: A 2.00 GPA is required in is required in each course that counts toward the major.

Satisfactory/No Credit option: No course that counts toward the major can be taken on an S/NC basis unless the student receives special permission from the major advisor.

Writing requirement: GER 1001 - GERMAN WRITING and GER 1003 GER 1003 - PROFESSIONAL GERMAN fulfill the requirement for a writing course in the major.

Honors requirements: To earn departmental honors in German, students must demonstrate superior performance in departmental courses by:

- earning an average GPA of at least 3.5 in their major courses;
- demonstrating a high level of proficienty in speaking and writing German; and
- completing a three-credit senior honors project (in addition to the credits required for the major), which has been accepted by the departmental faculty. Senior honrs projects may include:
    - a semester-long, independent research project, as an extension of the senior thesis written during the capstone seminar;
    - taking an exam on a comprehensive reading list derived by the student in consultation with the faculty; or
    - enrolling in a graduate seminar and completing a graduate paper.

Students are encouraged to study and reside in a German-speaking country as a component of the German major. Numerous possibilities exist for such study, and financial aid is often available.

Interdisciplinary German Studies

The study of foreign language and culture is a cornerstone of education in today's world. It teaches intercultural competence by increasing students' understanding of their own background and their sensitivity for other traditions and values. Knowledge of foreign language and culture brings obvious competitive advantages in careers with an international dimension. As a liberal arts discipline, it improves analytic-conceptual and communication skills necessary for professional careers. Enhanced with appropriate course work, a major in German serves as a foundation for professional training in such subjects as business, law, politics, and medicine, as well as the media and communication industry. Students with a bachelor's degree in German will compete well in non-technical fields for jobs requiring an undergraduate degree.

Required language courses

Students must take a minimum of four language courses and finish Intermediate German 2 as described. Equivalency of other courses will be determined by the department.

- GER 0101 - BEGINNING GERMAN 1
- GER 0102 - BEGINNING GERMAN 2

And one of the following groups of language courses.

- GER 0103 - BEGINNING GERMAN 3
- GER 0201 - INTERMEDIATE GERMAN 1
- GER 0202 - INTERMEDIATE GERMAN 2

- GER 0203 - INTENSIVE INTERMEDIATE GERMAN 1
- GER 0204 - INTENSIVE INTERMEDIATE GERMAN 2

Required writing-intensive course

Select one of the following writing-intensive courses.

- GER 1001 - GERMAN WRITING
- GER 1003 - PROFESSIONAL GERMAN

1000-level course

Students must complete one course at the 1000-level in the Department of German.

Literary analysis course

- GER 1105 - LITERARY ANALYSIS

1100- to 1400-level courses

Students must complete three courses at the 1100- to 1400-level in the Department of German.

1500-level courses

Students must complete four courses at the 1500-level in the Department of German. Courses with significant German Studies content offered by other departments may also satisfy this requirement. Check with the undergraduate advisor for information on non-departmental courses that qualify.

Capstone course

- GER 1990 - SENIOR THESIS

Other requirements

Grade requirements: A minimum GPA of 2.0 is required in each course that counts toward the major.

Satisfactory/No Credit option: No course that counts toward the major can be taken on an S/NC basis unless the student receives special permission from the major advisor.

Writing (W) requirement: Students must complete at least one W-course in the major. GER 1001 and GER 1003 fulfill this requirement.

Honors major requirements: To earn departmental honors in German, students must demonstrate superior performance in departmental courses by:

- earning at least a 3.5 GPA average in their major courses;
- demonstrating a high level of proficiency in speaking and writing German; and
- completing a three-credit senior honors project (in addition to 31 credits of the major) that has been accepted by the departmental faculty. Senior honors projects may include:
    - a semester-long, independent research project, as an extension of the senior thesis written during the capstone project; or
    - taking an exam on a comprehensive reading list derived by the student in consultation with the faculty; or
    - enrolling in a graduate seminar and completing a graduate paper.

Minor

German Studies Minor

In October 2020 the German Studies Minor was terminated. The last term students can be admitted into the German Studies minor is fall 2020. Students currently enrolled in the German Studies minor will have the option to select the new German Minor or to complete their program by spring 2025.

German Language, Literature, and Film

Language courses

Students must take two of the following courses. Students who take GER 0001 should follow it with GER 0002, and students who take GER 0101 should follow it with GER 0102 .

Students must pass GER 0004 with a grade of B- or better before taking any German courses taught at the 1000-level or higher.

- GER 0001 - ELEMENTARY GERMAN 1 or
- GER 0101 - BEGINNING GERMAN 1

- GER 0002 - ELEMENTARY GERMAN 2 or
- GER 0102 - BEGINNING GERMAN 2

- GER 0003 - INTERMEDIATE GERMAN 1
- GER 0004 - INTERMEDIATE GERMAN 2

Literature and Film courses

Students must complete three German courses at the 1000- through 1500-level .

German Literature and Film

Students must complete five German courses at the 1000- through 1500-level.

German Language

Language courses

Students must take the following courses. Students who take GER 0001 should follow it with GER 0002, and students who take GER 0101 should follow it with GER 0102 .

Students must pass GER 0004 with a grade of B- or better before taking any German courses taught at the 1000-level or higher.

- GER 0001 - ELEMENTARY GERMAN 1 and
- GER 0002 - ELEMENTARY GERMAN 2
  or
- GER 0101 - BEGINNING GERMAN 1 and
- GER 0102 - BEGINNING GERMAN 2

- GER 0003 - INTERMEDIATE GERMAN 1
- GER 0004 - INTERMEDIATE GERMAN 2

Upper level course

Students must complete one of the following upper-level language courses.

- GER 1000 - READING LITERARY TEXTS
- GER 1001 - GERMAN WRITING
- GER 1003 - PROFESSIONAL GERMAN
- GER 1004 - THE GERMAN BUSINESS (ECO)SYSTEM
- GER 1005 - GERMAN MEDIA

Certificate

German Language Certificate - German for Liberal Arts Track

German Language Certificate

The Certificate in German Language consists of 18 credits of German courses and prepares students for international careers, internationally recognized proficiency exams, and internships in German-speaking countries.

Requirements

The certificate offers two tracks: one for the liberal arts and one for professional purposes. Courses should be taken in sequence.

German for the Liberal Arts

The following courses should be taken, in sequence, by students in this track:

- GER 0003 - INTERMEDIATE GERMAN 1
- GER 0004 - INTERMEDIATE GERMAN 2 with a minimum grade of B- before taking any course in the GER 1000-level experience

Two of the following:

- GER 1000 - READING LITERARY TEXTS
- GER 1001 - GERMAN WRITING

One of the following:

- GER 1101 - GERMAN MEDIA 2
- GER 1102 - THE GERMAN-SPEAKING WORLD TODAY
  One of the GER 1200-1399 seminars taught in German

One of the GER 1200-1400 seminars taught in German

German Certificate note

Nine credits may be transferred from study abroad programs in German-speaking countries in accordance with the credit transfer policy of the University of Pittsburgh. These credits have to be pre-approved by the director of undergraduate studies.

A minimum GPA of 2.0 is required in each course that counts toward the certificate. No course that counts toward the certificate can be taken on an S/NC basis unless the student received special permission from the Director of Undergraduate Studies.

For more information, visit www.german.pitt.edu/undergraduate/certificate.php

German Language Certificate - German for Professional Purposes Track

German Language Certificate

The Certificate in German Language consists of 18 credits of German courses and prepares students for international careers, internationally recognized proficiency exams, and internships in German-speaking countries.

Requirements

The certificate offers two tracks: one for the liberal arts and one for professional purposes. Courses should be taken in sequence.

German for Professional Purposes

The following courses should be taken, in sequence, by students in this track.

- GER 0003 - INTERMEDIATE GERMAN 1
- GER 0004 - INTERMEDIATE GERMAN 2
- GER 1003 - PROFESSIONAL GERMAN
- GER 1004 - THE GERMAN BUSINESS (ECO)SYSTEM

German Certificate note

Nine credits may be transferred from study abroad programs in German-speaking countries in accordance with the credit transfer policy of the University of Pittsburgh. These credits have to be pre-approved by the director of undergraduate studies.

A minimum GPA of 2.0 is required in each course that counts toward the certificate. No course that counts toward the certificate can be taken on an S/NC basis unless the student received special permission from the Director of Undergraduate Studies.

For more information, visit www.german.pitt.edu/undergraduate/certificate.php

Additional coursework

Students must complete two additional courses at the 1000- or 1100-level. GER 1001, GER 1003, GER 1004, and GER 1103 do not fulfill this requirement.

Department of Hispanic Languages and Literatures

The study of a second language, literature, and culture like Spanish traditionally has been one of the central components of an undergraduate education in the humanities. Today there is an added practical dimension to this. With economic and cultural globalization, our links as a nation with Spain and Latin America, including Brazil, have become much closer. At the same time, Spanish is not only a second language for us; it has become much like French in Canada, a de facto second language in the United States, which now has a Spanish-speaking population of more than 30 million. As a result, there is a growing demand for persons trained in Spanish (and also Portuguese) in many fields, especially education, where there is a shortage of new teachers of Spanish language and culture.

The undergraduate **major in Spanish** at the University of Pittsburgh offers a balanced combination of courses designed to strengthen oral and written language skills, and courses that introduce students to the study of Spanish and Latin American literatures and cultures. Majors also have the

opportunity to enroll in the **minor in Portuguese Language and Luso-Brazilian cultures**, thereby opening channels of communication with millions of people around the world, including Brazil, Latin America's largest and most heavily populated country. Students with a more general interest in Latin American languages and cultures can choose to minor in Hispanic Languages and Literatures.

In all cases, we encourage students to include at least a semester of study abroad in a Spanish- or Portuguese-speaking country and we offer study-abroad programs. Students interested in going on to graduate school should strongly consider the honors major; those who want to teach Spanish can obtain teacher certification through the School of Education. The department also offers courses taught in English for non-majors interested in Hispanic, Latin American, Luso-Brazilian, or U.S. Latino cultures. Students can also take advantage of the **non-curricular** activities organized by the department, which include conversation clubs and films series.

Departmental Honors requirements

Especially for students interested in graduate work, the department offers honors in the major, which requires:

- a 3.5 average in departmental courses and 3.0 overall
- a senior thesis of 25-30 pages, written under the supervision of a faculty member close to the field of the thesis
- at least a semester of study abroad is strongly recommended but not required

Students should declare their intention to pursue the honors major no later than at the beginning of their senior year. The thesis will be evaluated by the advisor and two other faculty members in the department. Students may take an independent study with their supervisor that will fulfill the requirement of one upper level course. For further information, consult with the director of undergraduate studies

Teacher Certification

Students who plan to teach Spanish after completing the major should consult with their advisor or the director of undergraduate studies in the department, as well as with the advisors for Pennsylvania Teaching Certification and Masters of Arts in Teaching Programs in the School of Education (Maggie Sikors, mjs 169@pitt.edu, 5504 Posvar Hall, 412-648-7413).

Study Abroad Options for Majors in the Hispanic Languages and Literatures Department

Students are strongly encouraged to add an international dimension to their undergraduate education through studying abroad. By participating in a study abroad program, students earn credits toward their degree. The department offer four programs that are matched directly with major and minor requirements. Information on some of the programs follow.

Study abroad is strongly encouraged. The department offers four programs that are matched directly with major and minor requirements. Information on some of the programs follows.

- Study abroad in Alcalá de Henares, Spain (30 minutes from Madrid) runs every odd-numbered year; for more information, send an e-mail to alcala@pitt.edu.
- Study abroad in Santiago de Chile runs every even-numbered years; for more information, send an e-mail to chile@pitt.edu.
- Study abroad in Porto Alegre, Brazil runs every year; for more information, send an e-mail to brazilsa@pitt.edu.
- Study abroad in Havana, Cuba runs every year; for more information, contact the Study Abroad Office (www.abroad.pitt.edu) via e-mail abroad@pitt.edu or by phone at 412-648-7419.

Major

Spanish, BA

The undergraduate program in Hispanic Languages and Literatures at the University of Pittsburgh is designed to be flexible and diverse in order to meet the needs of students with varying interests and career goals. The major offers a balanced combination of courses designed to strengthen oral and written Spanish language skills and courses that introduce students to the study of Spanish and Latin American literatures and cultures. Majors also have the opportunity to enroll in the minor in Portuguese Language and Luso-Brazilian Culture, thereby opening channels of communication with millions of people around the world, including Brazil, Latin America's largest and most heavily populated country. Students with an interest in Latin American languages and cultures can chose to minor in Spanish. In all cases, we encourage students to include at least one semester of study abroad in a Spanish- or Portuguese-speaking country. Students interested in going to graduate school should consider the honors major; those who want to teach Spanish can obtain a teacher certification through the School of Education. The department offers courses taught in English for non-

majors interested in Hispanic, Latin American, Luso-Brazilian, or U.S. Latino cultures. Finally, students can take advantage of the non-curricular activities organized by the department, which include conversation clubs and films series.

Major requirements

Prerequisites

Before declaring the major, students must complete four Spanish language courses in order to gain the indispensable skills to effectively read, write and discuss in a second language. Students with any previous knowledge of Spanish must take a placement test. Please note that *a grade of B+ or higher in SPAN 0104 is required to declare the major.* The Spanish major requires students to complete 38 credits of coursework as detailed below.

Required Courses

Basic Level

- SPAN 0120 - CONVERSATION
- Either SPAN 0125 - GRAMMAR AND COMPOSITION or
- SPAN 0126 - SPANISH ADVANCED GRAMMAR AND COMPOSITION FOR HERITAGE SPEAKERS
- Either PORT 0101 - ELEMENTARY PORTUGUESE 1 or
- PORT 1010 - PORTUGUESE FOR SPANISH SPEAKERS 1

Mid Level

All of the following courses are required. SPAN 1055 meets the writing requirement. PORT 0101 cannot be used to meet reuirements for teh Spanish major and the Porguguese and Luso-Brazilian minor.

- Either SPAN 1055 - INTRODUCTION HISPANIC LITERATURE 1 or
- SPAN 1056 - NARRATIVE MEDICINE & ANALYTICAL WRITING
- SPAN 1250 - HISPANIC CIVILIZATIONS
- Either SPAN 1260 - OVERVIEW OF SPANISH LITERATURE or
- SPAN 1280 - OVERVIEW OF LATIN AMERICAN LIT
- SPAN 1300-level course
- One additional SPAN course at the 1200-level or 1300-level

Upper Level

- SPAN 1806 - CAPSTONE SEMINAR

Three electives

Students must complete three upper-level elective courses from the 1400, 1600, and/or 1700 series. These courses address topics such as colonial literatures and cultures; the Latin American novel; U.S.-Latino literature and film; the African presence in Hispanic literature and culture; Queer Mexico; the Incas.

PORT 0102 - ELEMENTARY PORTUGUESE 2 may be used to meet this requirement only if the student is pursuing the Portuguese and Luso-Brazilian minor.

Additional information and requirements

- **W requirement:** Spanish majors must complete one writing-intensive (W) course in the major. The following courses satisfy this requirement.
    - SPAN 1055 - INTRODUCTION HISPANIC LITERATURE 1
    - SPAN 1056 - NARRATIVE MEDICINE & ANALYTICAL WRITING
- **Grade requirements:** Students must maintain an average GPA of 2.0 or above in all department courses. No courses with a grade of C- or lower will count toward the major.
- **Satisfactory/No-Credit option:** Majors may take one required course on an S/NC basis.

- **Language of instruction:** Spanish majors can take up to one curse offered by the department that is taught in English. In order to have it count toward minor requirements, written assignments must be submitted in Spanish.
- **Study Abroad:** At least one term of study abroad is recommended.
- **Credits in residence:** To complete the Spanish major, students are required to take at least half of the credits required for the major while in residence in the Dietrich School.
- **Placement into language courses:** For the Spanish placement test, please contact the Spanish Language Coordinator, Dolores Lima, dlima@pitt.edu. For the Portuguese placement test, please contact the Portuguese Language Coordinator, Ana Paula Carvalho, apcst11@pitt.edu.
- **Credit by examination:** Students may receive credit by examination for some Spanish language courses. Similar credits may be earned in Portuguese.

Double majors, dual degrees and CLAS certificates

Students who have declared an additional major or pursue a dual degree need to take only three of the four upper-level courses. The same rule applies to students taking the CLAS Field Trip to Latin America. Only one course reduction applies if a student meets more than one of these criteria.

Minor

Hispanic Language and Culture Minor

The Hispanic Language and Culture minor will prepare students for graduate studies, professional studies, and work, it will prepare students to take Hispanic linguistics and advanced cultural and social courses that apply to the region. It requires fewer literary courses than the traditional Spanish minor while helping students to sharpen their communication skills and cultural understanding.

This minor requires 18 credits for completion. At least half of the credits for the minor, including no fewer than one upper-level course, must be taken on the Pittsburgh campus.

Core courses

- SPAN 0120 - CONVERSATION
- Either SPAN 0125 - GRAMMAR AND COMPOSITION or
- SPAN 0126 - SPANISH ADVANCED GRAMMAR AND COMPOSITION FOR HERITAGE SPEAKERS
- SPAN 1250 - HISPANIC CIVILIZATIONS
- SPAN 1312 - OVERVIEW OF SPANISH LINGUISTICS

Upper-level required course

One course from the following list.

- SPAN 1056 - NARRATIVE MEDICINE & ANALYTICAL WRITING
- Any 1300-level SPAN course

Upper level elective course

Students must complete one additional upper-level course from the 1400-, 1600-, or 1700-series. The department prefers that students choose courses identified as having a focus on culture or cultural studies rather than a literary emphasis.

Additional requirements and information

Language of Instruction

Students pursuing the Hispanic Language and Culture minor can take up to one course offered by the department that is taught in English. In order to have it count toward minor requirements, however, written assignments must be submitted in Spanish.

Credits in Residence

To complete the Hispanic Language and Culture minor, students are required to take in residence at the University of Pittsburgh a minimum of nine credits of the 18 required for the minor. One upper level elective must be included in these nine credits.

Grade Requirements

Students must maintain an average grade of C or higher in all department courses. No course with a grade below C will count toward minor requirements.

Satisfactory/No Credit Grade Option

No course that counts toward this minor may be taken on the Satisfactory/No Credit (S/NC) grade basis.

Portuguese and Luso-Brazilian Culture Minor

Students interested in studying the Portuguese language and the cultures of Brazil and other Portuguese-speaking countries can enroll in the minor in Portuguese Language and Luso-Brazilian cultures. This course of study opens channels of communication with millions of people around the world, including Brazil, Latin America's largest and most heavily populated country. The department encourages students to include at least one semester of study abroad in a Portuguese-speaking country. The department offers courses taught in English for students interested in Hispanic, Latin American, Luso-Brazilian, or U.S. Latino cultures.

Students must complete at least 15 credits of coursework, described as follows, to complete the minor.

Required courses

- Either PORT 0101 - ELEMENTARY PORTUGUESE 1 or
- PORT 1010 - PORTUGUESE FOR SPANISH SPEAKERS 1
- PORT 0102 - ELEMENTARY PORTUGUESE 2
- PORT 0103 - INTERMEDIATE PORTUGUESE 3
- PORT 0104 - INTERMEDIATE PORTUGUESE 4
- PORT 0120 - CONVERSATION
- PORT 0125 - GRAMMAR AND COMPOSITION
- PORT 1052 - LUSO-BRAZILIAN LITERATURE
- PORT 1053 - LUSO-BRAZILIAN TOPICS
- PORT 1061 - SURVEY OF BRAZILIAN LITERATURE
- PORT 1458 - CULTURES OF THE PORTUGUESE SPEAKING WORLD

Additional Requirements

Declaring the minor

Students must apply for any official minor they will complete or have completed at the time they apply for graduation. Students must complete at least half of the credits toward these minors while enrolled in the Dietrich School of Arts and Sciences at the University of Pittsburgh.

Grade requirements

Students must maintain a minimum GPA of 2.0 or higher in departmental courses. No course with a grade below C will count toward the major requirements.

Placement

If a student places out of a required course for the minor, the student will need to take the equivalent number of credits in additional mid- or upper-level Spanish courses in order to meet minimum credit requirements.

Additional Information

Study Abroad

The department offers programs in Buenos Aires, Argentina; Alcalâ de Henares, Spain; Havana, Cuba; and Lisbon, Portugal. For more information please visit the Study Abroad Office website at http://www.abroad.pitt.edu/ or by phone 412-624-7413.

Spanish writing center

This center provides free, individual help to students enrolled in language, grammar and literature courses. Students may also stop by to practice their conversational skills. The Spanish Writing Center, located in CL 1302-B, is staffed by TAs and/or TFs from the department. The center will be open from September to May; schedules are announced at the beginning of each fall and spring term.

Spanish and Portuguese clubs

These two clubs will offer activities throughout the academic year. Check the department's Web site for details about Mesas de conversación, Movie Nights, and Brazil Nuts events.

Spanish Minor

Before declaring the Spanish minor, students must complete four Spanish language courses in order to gain indispensable skills to effectively read, write, and discuss in a foreign language. Students with previous Spanish experience are encouraged to take a placement exam. Students must earn a grade of B+ or higher in SPAN 0004 to declare this minor.

Prerequisite courses

- SPAN 0001 - ELEMENTARY SPANISH 1
- SPAN 0002 - ELEMENTARY SPANISH 2
- SPAN 0003 - INTERMEDIATE SPANISH 3
- SPAN 0004 - INTERMEDIATE SPANISH 4

Required courses

- SPAN 0120 - CONVERSATION
- Either SPAN 0125 - GRAMMAR AND COMPOSITION or
- SPAN 0126 - SPANISH ADVANCED GRAMMAR AND COMPOSITION FOR HERITAGE SPEAKERS
- SPAN 1250 - HISPANIC CIVILIZATIONS
  And one of the following courses.
- SPAN 1055 - INTRODUCTION HISPANIC LITERATURE 1
- SPAN 1056 - NARRATIVE MEDICINE & ANALYTICAL WRITING
- SPAN 1260 - OVERVIEW OF SPANISH LITERATURE
- SPAN 1280 - OVERVIEW OF LATIN AMERICAN LIT

Two of the following courses

- Any SPAN 1400-level course
- Any SPAN 1600-level course
- Any SPAN 1700-level course

Department of History

Historians use methods, techniques, and ideas from a wide range of humanistic and social scientific fields to teach students how materials from many fields are integrated to describe or explain a particular historical time period or topic. History is an open-ended discipline, and the department welcomes students, as well as ideas and techniques, from other subjects. History also gives a student many options for a future career. Many history majors have become lawyers, journalists, civil servants, and business executives. The future of a history major is not limited to college or school teaching, although these are also available career choices. Expanding opportunities are to be found in public and private agencies, in businesses, archives, historical societies, museums, and government offices. History courses may help students to develop a balanced program that will further their career and intellectual goals. Courses in economics and history could lead to an understanding of economic development and aid a business or civil service career; a combination of language, literature, and history would give a student background that could lead to a career in foreign service or teaching; a mixture of communication and writing with history might prepare one for a career in journalism. In short, students in practically any

field can investigate questions that are intellectually exciting and personally helpful by taking history courses related to their programs and ambitions. For more information on the major, the minor, or the Department of History, visit http://www.history.pitt.edu/.

Major

History, BA

Major Requirements

The History major requires completion of 36 credits, 18 of which must be at the 1000-level, distributed as follows.

Pre-1800 history course

Complete one course in pre-1800 history. A partial list of eligible courses follows.

- HIST 0089 - MAGIC, MEDICINE AND SCIENCE
- HIST 0100 - WESTERN CIVILIZATION 1
- HIST 0400 - EAST ASIAN CIVILIZATION TO 1800
- HIST 0500 - COLONIAL LATIN AMERICA
- HIST 0751 - ANCIENT WORLDS
- HIST 0755 - RELIGION IN ASIA
- HIST 0756 - INTRODUCTION TO ISLAMIC CIVILIZATION
- HIST 0788 - WOMEN AND MEN IN ANCIENT MEDITERRANEAN SOCIETY
- HIST 0795 - HISTORY OF AFRICA BEFORE 1800
- HIST 1110 - MEDIEVAL HISTORY 1
- HIST 1111 - MEDIEVAL HISTORY 2
- HIST 1115 - THE WEST AND THE WORLD
- HIST 1121 - TUDOR ENGLAND
- HIST 1190 - MEDIEVAL GOVERNMENT AND SOCIETY
- HIST 1191 - ENGLISH ORIGINS OF AMERICAN LAW
- HIST 1420 - ANCIENT CHINA
- HIST 1422 - LATE IMPERIAL CHINA
- HIST 1475 - EAST ASIAN BUDDHISM
- HIST 1476 - RELIGION AND HEALING IN CHINA
- HIST 1477 - RELIGION IN JAPAN
- HIST 1610 - UNITED STATES COLONIAL
- HIST 1611 - AMERICAN REVOLUTION 1763-1791
- HIST 1740 - BUDDHIST MEDITATIVE TRADITIONS
- HIST 1757 - RELIGION IN INDIA
- HIST 1765 - ISRAEL IN THE BIBLICAL AGE
- HIST 1775 - ORIGINS OF CHRISTIANITY
- HIST 1776 - VARIETIES OF EARLY CHRISTIANITY
- HIST 1781 - ROMAN HISTORY
- HIST 1783 - GREEK HISTORY

U.S. History survey course

Choose one of the following courses.

- HIST 0600 - UNITED STATES TO 1877
- HIST 0601 - UNITED STATES 1865-PRESENT
- HIST 0670 - AFRICAN AMERICAN HISTORY TO 1877
- HIST 0671 - AFRICAN AMERICAN HISTORY SINCE 1865

Global Understanding

Complete one course each in four of the following six categories.

- Africa
- Asia
- Europe
- Latin America
- Middle East
- World/Comparative

Concentration

Three additional courses are to be selected by the student with the help of a faculty member or the undergraduate advisor to form a chronological, geographic, or thematic concentration, which should normally be decided upon by the junior year.

Skills

Each student must take the following sequence of two courses.

An upper-level writing-intensive (W) course may be substituted for HIST 1001. The alternate course should be taken as soon as practicable. HIST 1001 must be taken before enrolling in HIST 1000.

- HIST 1001 - INTRODUCTORY SEMINAR
- HIST 1000 - CAPSTONE SEMINAR

Elective History course

Complete any course offered by the Department of History.

Notes

The following rules and requirements apply for history majors.

- Students must earn at least a 2.00 overall GPA in history courses.
- Majors may take a total of nine credits for the major on an S/NC basis. HIST 1000 - CAPSTONE SEMINAR or HIST 1001 - INTRODUCTORY SEMINAR may not be taken S/NC.
- History majors are strongly encouraged to add an international dimension to their undergraduate education by studying abroad.
- Students interested in graduate study in history should be aware that all graduate departments of history require proficiency in at least one second language and that many require competence in two languages for a PhD.
- The honors program consists of the regular major plus six extra credits. Honors students must take the following courses.
    - One University Honors College course in History, which may count toward another requirement for the major (e.g. Global Understanding or the Concentration).
    - HIST 1902 - WRITING: HISTORY HONORS SEMINAR (instead of HIST 1000; this course is offered only in the fall term)
    - HIST 1901 - INDEPENDENT STUDY
    - HIST 1903 - HONORS THESIS/MAJORS; students in this course write a paper of 25 to 50 pages

Students may apply for the honors program in thier sophomore year and upon completion of at least 12 credits in history. To apply, students must have a minimum 3.5 GPA in hsitory courses, an overall GPA of at least 3.35, and submit a writing sample for approval by the Undergraduate Committee. The minimum letter grade requirement for honors students is B.

Internships for History Credit

History majors may do an internship for 3 credits (HIST 1900) in a local museum in either the fall or spring semesters. Contact the history academic advisor for information.

Study Abroad

Each year the department offers a scholarship for study abroad. Applications for the A. J. Schneider Award are due by February each year. Contact the history undergraduate advisor for more information.

Minor

History Minor

This minor requires 15 credits to complete, as detailed below. At least three of the required courses must be taken on the Pittsburgh campus.

Minor Requirements

Students pursuing the History minor should select one of the options described below. The department recommends selecting courses in consultation with the departmental advisors.

Option 1: Regional

Lower-level courses

Complete any two HIST survey courses in the 0000- through 0900-series.

Upper-level courses

Complete three upper-level courses on a regional area covered in one of the two lower-level courses. These courses will be chosen in consultation with the departmental advisor.

Option 2: Global

Lower-level courses

Complete any two HIST survey courses in the 0000- through 0900-series.

Upper-level courses

Complete three upper-level courses from three of the categories listed in **Global Understanding** described in the History major. These courses will be chosen in consultation with the departmental advisor.

Option 3: Thematic

Lower-level courses

Complete any two HIST survey courses in the 0000- through 0900-series.

Upper-level courses

Complete three upper-level courses that constitute a thematic concentration. These courses will be chosen in consultation with the departmental advisor.

Department of History of Art and Architecture

Art, like science or language, is an intrinsically human way of organizing our experience of the world. Because it appeals to a fundamental sense of order, art can speak to us with immediacy even without knowledge of the purposes for which it was created and the particular principles or order adhered to by the artists of a given culture. Still deeper understanding may follow, however, from an awareness of these purposes and principles, and

courses in art history are concerned with the study of art and architecture as cultural documents of the values and ideals of various cultures. Art history offers an opportunity to consider objects and environments that have been created in response to some of humanity's loftiest and most basic aims. The requirement that these visual expressions be analyzed and evaluated in the medium of words makes art history a rewarding area of humanistic study. The major in the history of art and architecture offered by the HAA department helps prepare individuals for careers calling for skills in writing, where description and analysis play important roles, as well as for careers more immediately related to art, such as those of critic, teacher, librarian, art administrator, or museum or gallery staff member.

The architectural studies major, also administered by the HAA department, offers a curriculum devoted to the study of human-made environments. The major components include history of architecture, studio arts, and a core curriculum that includes a survey of the history of architecture, the history of architecture theory, a professional internship, and a portfolio. The degree is suitable for a wide variety of careers and professions including the design and construction of the built environment, such as landscape architecture, interior design, restoration, historic preservation, real estate development, and contracting. These interests can be categorized in two groups:

- The preprofessional studies category prepares students for graduate professional training in any of the environmental design fields (architecture, interior design, landscape design, urban planning, and preservation). Students are able to explore a professional interest while acquiring a liberal arts education.
- The nonprofessional studies category is for students not interested in becoming professional architects. This program offers a rigorous curriculum that assists students in exploring their interest in environmental arts and criticism and provides an understanding of the environment's integral relationship with society and culture.

Students of both categories should be fully aware that this degree in architectural studies does not in itself constitute professional or technical training. Students seeking recommendations to graduate professional programs in architecture must complete a number of natural science courses in addition to those focused on architecture and design. Proficiency in calculus is required for students seeking a career in architecture. The department strongly recommends that students successfully complete at least one term of college level calculus (MATH 0220 or equivalent) before graduation.

For more information on these majors and the History of Art Architecture department, see www.haa.pitt.edu.

Architectural Studies Major

This major offers students two options - the Design track and the Preservation Track.

Major

History of Art and Architecture - Honors Major Option, BA

Option Requirement

Students electing the HAA 36-credit program and who have at least a 3.50 overall GPA and a 3.50 GPA in HAA may qualify for departmental honors by meeting the following requirements. This option is especially recommended for students planning to apply to graduate programs in the history of art architecture or related fields.

Honors major requirements: Honors in the history of art and architecture is granted if the student satisfies all requirements for the intensive major, and:

- maintains a GPA of 3.5 or above in HAA courses;
- maintains an overall GPA of 3.5 or above;
- completes HAA 1950 HAA 1950 - SENIOR THESIS with a minimum grade of A-, and;
- completes HAA 1951 HAA 1951 - HONORS RESEARCH SEMINAR .

HAA 1950 and HAA 1951 can be applied toward the 1000-level requirements for the major.

History of Art and Architecture, BA

The HAA major requires the completion of 29 credits. An intensive major option that requires 38 credits also exists; this option is highly recommended for students whose only major is HAA and/or who seek to embark on arts-related careers.

Core Courses

- HAA 0010 - INTRODUCTION TO WORLD ART
- HAA 0101 - FOUNDATIONS OF ART HISTORY

- HAA 0102 - PROSEMINAR FOR UNDERGRADUATE MAJORS
  Students must take this 1-credit course twice. Those who are pursuing a second major should consult with the departmental advisor if completing this course twice might impede their academic progress.

One of the following courses

- HAA 1010 - APPROACHES TO ART HISTORY
- ARC 1160 - ARCHITECTURE: IMAGE, TEXT, THEORY

Nine additional courses, as follows

Beyond the core curriculum, students must take an additional six courses according to the following requirements. Student pursuing the intensive track must take an additional nine courses according to the following requirements.

Breadth Requirements

Students must take at least one class from each of the following areas.

- Ancient art across the globe
- Asian art
- European art before 1750
- Modern or Contemporary art

Additionally, students must complete at least two courses at the 1000-level that address Comparative or World art. Students pursuing the intensive option should take four courses at the 1000-level in these categories.

Studio Arts

Students may elect to take one of the following courses toward completion of their HAA major.

- SA 0110 - VISUAL THINKING
- SA 0120 - PAINTING STUDIO 1
- SA 0130 - DRAWING STUDIO 1
- SA 0140 - SCULPTURE STUDIO 1
- SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1

Other requirements

Grade requirements: A minimum GPA of 2.0 in departmental courses is required for graduation.

Satisfactory/No Credit option: No course required for the major can be taken on an S/NC basis except HAA 1901, HAA 1903, ARC 1901, HAA 1905, and HAA 1909. These experiential learning courses **do not** count toward the 1000-level requirements.

Writing (W) requirement: Students must complete at least one W-course in the major. HAA 1010 is the W course for the HAA major.

Museum Studies, BA

The newly proposed major will expand upon the strengths of the existing minor, pairing professional methods, skill-building, and mentorship in practicum courses with those that center on historical contexts, critical and theoretical approaches, and ethical questions. Below we outline the existing minor requirements alongside those for the new major. We have also provided an annotated curricular map that charts how students will move from pre-disciplinary questions and skill-building, to foundational disciplinary work and the acquisition of content knowledge, to an intensive engagement with museum history and practice. For the capstone experience, students will have the option of completing an intensive internship or completing an independent project. The proposed new major is 30 credits.

Students will gain and deploy their knowledge regarding the approaches, histories and theories of museums, cultural property and curatorial practice. The central disciplinary-specific learning objectives for the new major include the following.

Students will:

- Participate in debates about how and why particular objects are deemed to be "significant" by their inclusion in archives, collections and museums
- Chart the movement of culturally relevant objects, understand why this matters, and relate this mobility to legal and ethical debates concerning cultural property
- Learn the key issues central to the social problems and possibilities engaged by the museum as an institution
- Learn how museum practices and policies intersect with issues of inclusion, access and engagement
- Examine how museums can serve as contexts for community participation, agency and social change
- Connect techniques of display to the socio-political dimensions inherent in the encounter between exhibitions and their audiences
- Deploy research skills to interpret and contextualize objects in ways that engage diverse audiences
- Communicate historical and cultural narratives through images, objects and spaces
- Use a range of investigative tools and approaches with which to analyze the theory and practice of museums through an interdisciplinary approach that is inherent in museum work
- Apply key concepts in museological theory and ethics to the critical analysis of museum practice, including collecting and display
- Engage in professional-driven hands-on learning experiences to expand their knowledge of museum professions and gain career-focused mentoring through internships, collaborative practice courses, and developmental cohorts
- Gain an understanding of the range of practical skills and knowledge required for succeeding in the museum professions including administration, collections management, exhibition development, education, community engagement, development and fundraising

In addition to the disciplinary-specific learning objectives outlined above, in crafting this curriculum we were also cognizant of the need to focus on the dispositional skill development of our students. We believe it is important to outline the broader professional competencies our students will attain that could be leveraged toward career-advancement in other industries and fields. We define these as core competencies and have distributed them across the curriculum. While some of these will be more centrally emphasized in some classes (for example, collaboration, project management and organization, problem solving, and identifying resources and challenges are integral to HAA 1019, 1020 and 1021; and close and slow looking, historical analysis and global understanding are privileged in HAA 0010 and HAA 0101), pedagogical approaches in all classes will touch on many of these.

The broad educational principles outlined below, and the curriculum we have built to nurture them, articulate why this major is particularly relevant in today's world which increasingly requires agile thinking, creative problem solving, curiosity, a cognizance of the importance of learning, and adaptability.

1. Building Empathy: Ethics and Citizenship

- Historical Analysis
- Global Understanding
- Cultural Critique
- Collaboration
- Reflective and Mindful practice

2. Analysis and Communication

- Close and slow looking, visual literacy
- Critical analysis of texts, material objects, artifacts, images, sites, and built environments
- Design and spatial thinking, visual intelligence
- Successful argumentation
- Communication – written, oral and multi-modal for scholarly, professional and public audiences
- Creative Inquiry (curiosity and research)

3. Adaptability, Organization and Productivity

- Project organization and management
- Problem solving
- Identifying resources and challenges
- Strategic thinking: recognizing choices, taking purposeful action

In conclusion, we are purposefully seeking to balance and interweave content knowledge acquisition, curiosity and engagement, and dispositional and metacognitive skill development more purposefully.

Expanding the Minor Curriculum into a Major

The curriculum outlined in the charts accompanying this proposal (see supporting documents) is designed as a scaffolded structure that is strong and established, yet also malleable, able to adapt as the program and field develops.

Launching the Major. As an introduction to the major, students are required to take a series of courses that introduce them to the field of Museum Studies and art historical approaches to interpreting images, material objects, artifacts and built environments. These courses include Introduction to World Art (HAA 0010), and a new course, Museums: Society and Inclusion? (HAA 0125). Intro to World is a large enrollment course offered every fall and spring to 200 students and consists of lecture and lab sections. We will launch Museums: Society and Inclusion? in the fall of 2020 as a medium enrollment course (40) but can convert this into an auditorium class for larger enrollments if demand necessitates it. These courses will meet Dietrich School General Education requirements, and begin by engaging students in the content at a pre-disciplinary level – Why Museums? Why Art? What are these? What roles do they play or needs do they serve? What skills can you learn here that are universally purposeful? These courses are principally centered on issues of diversity and inclusion – where have we been, who are we, and where are we going? What histories, collections and stories should museums be documenting, collecting, displaying and commemorating in the future?

NEW: Museums: Society and Inclusion? will prompt students to contemplate the role of the museum in a democratic society by focusing intensively and purposefully on the dependency between the modern institution and forces of colonialism and imperialism, on contested claims of ownership (cultural property), and ethical questions that contemporary museums face (access and inclusion). This strategy is inspired by the work that has been produced in a series of workshops designed by the Collecting Knowledge Pittsburgh partnership, supported by the Mellon grant, all of which provided opportunities to address important social justice issues through collections and archives within the city:

2016: Race-ing the Museum – race, diversity challenges, inclusion

2017: Consuming Nature – sustainability and the environment

2018: Making Advances – gender, sexuality, and sexual identity

2019: Work Forces – labor and production means

Importantly, the course will address the function of the museum in relationship to its collecting practices and its publics in the past, present, and future. Thus students will not only learn that museums were shaped by and in turn shaped uneven power relationships and inequity—but will also consider ways in which museums can serve and speak with diverse communities more productively in the future. The syllabus for this course is provided as a supplementary document.

Breadth and Disciplinary Foundations. Students will be required to take HAA 0101: Foundations of Art History which compels them to engage with an object in the Carnegie Museums of Pittsburgh, develop early research skills, and become more fluent in the critical and methodological approaches employed by the discipline. This course is a small seminar, and will be proposed to meet the writing ("w") requirement for the Dietrich School. In addition, students will extend their content knowledge by taking a series of courses in our department or others that focus particularly on art, material culture, architecture and urban planning in institutional contexts, how these shape power relationships in society, and how these contextual relationships and meanings shift through history. See below for a listing of "Art and Its Publics" courses that meet this requirement.

Skill Development. Students take two 1-credit workshops that are designed to interweave with the content-based curriculum that is the primary focus of the breadth courses. Students will be compelled to think holistically about their academic major(s), coursework and learning experiences; their goals; personal and professional interests; the skills and knowledge they are gaining outside our department; and practices in which they engage outside of school. Taken together, these distinctive workshops both advance professional goals and practices while helping students gain metacognitive abilities to become learners for the sake of learning. These classes focus on dispositional skills and are centrally focused on preparing students more effectively for the capstone. These workshops will be complemented by a course students are required to take beyond the HAA department that will extend a student's professional competencies, preparing them to carry-out public facing humanities work. See below for a listing of "Skill and Competency" courses that will meet this requirement.

Advanced Coursework. The major's foundational sequence builds competencies required to support the student's engagement in the program's intensive coursework in history and practice. The advanced seminars prepare students to undertake work in a professional museum context or at the graduate level. Students will take a minimum of 6 credits (a course in Museum History, and one in Museum Practice).

Museum History. Students will select either "The History and Ethics of Collecting" course, described above, or a new course, "The Global Politics of Display," which engages with histories and theories of display by surveying a range of important exhibits of art, visual and material culture from the nineteenth century to the present. In the former, students engage in a provenance research project that considers issues of cultural property and ethics of ownership, while students in the "Display" course undertake a research project that uses a local exhibition as a case study to consider techniques of display as well as the socio-political dimensions inherent in the encounter between exhibitions and their audiences.

Museum Practice. The core courses in Museum Practice, previously discussed, already exist as they were designed for the minor:

- Curatorial Development
- Exhibition Development
- Inside the Carnegie Museums

These courses are project-based initiatives that prioritize active learning. The focus is on collaborative inquiry and knowledge generation as well as public accountability. Museum Practice courses will be limited to 19 students each.

All of the above advanced courses are designed to give students an in-depth understanding of the field's historical stakes and practices but can be adapted to capitalize on events, exhibitions or museum projects transpiring in given semesters, and/or aligned with particular research projects undertaken by the department's faculty.

Capstone: Culminating Internship or Independent Project. We already work with students to develop tailored internship projects based on their goals and professional interests. We will continue this practice with the new major. We will also give students the opportunity to complete an intensive independent project, an option that exists for our current HAA and Architectural Studies majors. We are adding a 1-credit Pre-Internship workshop which will enable students to think more strategically about the work they seek to do, the institution with which they wish to partner, and how to best prepare for an optimal internship experience. In both the internship and independent project options, students will gain professional experience and generate a purposeful self-authored project in collaboration with a given institution and/or mentor.

Modes of Work:

Throughout the major, students may opt to engage in traditional scholarly research and write papers, but other options will be available: oral history projects; journaling and blogging; creating installations or mini-exhibitions (in digital or real-space); creating a documentary, video or digital media project; designing a public workshop; organizing or participating in symposia; developing a new special-topics course; generating a pod-cast; developing a public interview or panel discussion.

REQUIREMENT LISTINGS:

ART AND ITS PUBLICS COURSES:

Students are required to take two courses (6 credits) taught in the History of Art and Architecture and other departments that focus particularly on art, architecture and urban planning in institutional contexts and how these shape power relationships in society. These courses should devote at least 60% of content to material artifacts, objects, images, built environments, architecture or sites with a consideration of their shifting contexts through history.

Any Museum History course not taken toward the core requirement can be taken to satisfy this nexus.

HAA 0020Introduction to Asian Art

HAA 0030Introduction to Modern Art

HAA 0070Art of Europe

HAA 0090 Intro to Contemporary Art

HAA 0105Art and Empire

HAA 0160Ancient Empires

HAA 0302Renaissance Art

HAA 0380Art of the Spanish World

HAA 0460Art in Public: Inclusion, Identity, and Activism

HAA 0520Art and Politics in Modern Latin America

HAA 0620Art of China

HAA 1050World Art: Contact and Conflict

HAA 1130Roman Art

HAA 1304Leonardo, Michelangelo, Raphael: Painting in 16th-c. Italy

HAA 1450Art and Politics in the Weimar Republic

HAA 1455Art in the Third Reich and Memorializations of the Holocaust

ARC 0110Approaches to the Built Environment

ARC 0112Architecture of the Pre-Modern World

ARC 0114Islamic Architecture

ARC 0116Modern Architecture

ARC 0153Medieval Architecture

ARC 0182The City of Rome and its Architecture

ARC 1183 Digital Roman Africa

ARC 1330Global Preservation

ANTH 0538The Archaeologist Looks at Death

ANTH 0582Intro to Archaeology

ANTH 0780Intro to Cultural Anthropology

CLASS 0600Intro to Mediterranean Archaeology

CLASS 0650Archaeology of the Body

CLASS 1630Marginality in the Ancient Greek World

COMMRC 1035Visual Rhetoric

COMMRC 1103Rhetoric and Culture: Urban Visual Culture

ENGFLM 1417/FMST 1417Film Festivals and Industry

ENGLIT 1412 Secret Pittsburgh

ENGLIT 1413 Humanities in the City

ENGLIT 1635Children in Pittsburgh

RELGST 1148Religions of Ancient Egypt

RELGST 1160Jerusalem: History and Imagination

RELGST 1170Archaeology of Israel/Palestine

RELGST 1240Jews and the City

RELGST 1452Hymns and Hip Hop: Sounds of Islam

RELGST 1520Buddhism Along the Silk Road

RELGST XXXXReligion in Pittsburgh (in development)

SKILL AND COMPETENCY REQUIREMENT COURSES:

Students must take one of the following courses that will advance professional skills and/or competencies:

ANTH 1541Cultural Resource Management

ANTH XXXXArchaeological Geophysics (in development)

COMMRC 0300 Communication Process

COMMRC 0520 Public Speaking

COMMRC 1102 Organizational Communication

COMMRC 1162 Invention: Where do good ideas come from? (UHC course)

COMMRC 1170 Cross Cultural Communication

ENGCMP 0420Writing for the Public

ENGCMP 0520Integrating Writing and Design

ENGCMP 0610Composing Digital Media

ENGCMP 0641Writing for Change

ENGCMP 1103Public Relations Writing

ENGCMP 1112Professional Uses of Social Media

ENGCMP 1400Grant Writing

ENGCMP 1401Writing for Fundraising and Development

ENGCMP 1410Advanced Research and Documentary Writing

ENGCMP 1420Writing Proposals for Business

ENGFLM 0401/FMST 0130Intro to Visual Cultures

HIST 0760Introduction to Public History

INFOSCI 0010Intro to Information Systems and Society

PUBSRV 0050 Ethics and Accountability

PUBSRV 1200 Practices of Non-Profit Management

PUBSRV 1210 Financial Management of Non-Profit Organizations

PUBSRV 1230 Fundraising for Non-Profits

PUBSRV 1390 Theories of Leadership

For Course Descriptions of core courses, see Appendix A.

Required Courses

- HAA 0010 - INTRODUCTION TO WORLD ART
- HAA 0101 - FOUNDATIONS OF ART HISTORY
- HAA 0102 - PROSEMINAR FOR UNDERGRADUATE MAJORS
- HAA 0125 - MUSEUMS: SOCIETY AND INCLUSION?
- HAA 1019 - CURATORIAL DEVELOPMENT
- HAA 1020 - EXHIBITION DEVELOPMENT
- HAA 1021 - INSIDE THE MUSEUM
- HAA 1025 - HISTORY AND ETHICS OF COLLECTING
- HAA 1030 - SPECIAL TOPICS- MUSEUM HISTORIES
- HAA 1905 - MUSEUMS STUDIES INTERNSHIP

- HAA 1951 - HONORS RESEARCH SEMINAR

Minor

Museum Studies Minor

This minor is grounded in the department's historic strengths - to offer students a critically informed understanding of how cultural artifacts have been, are, and can be collected and curated. At its core, the goal of the Museum Studies Minor is to introduce students to the approaches, history, and theories of museum and collection practices.

Students pursuing the Museum Studies minor must complete the following coursework, which comprises 16 credits.

One foundational course from the following list

- HAA 0010 - INTRODUCTION TO WORLD ART
- HAA 0020 - INTRODUCTION TO ASIAN ART
- HAA 0030 - INTRODUCTION TO MODERN ART
- HAA 0090 - INTRODUCTION TO CONTEMPORARY ART

The following three courses

- HAA 1020 - EXHIBITION DEVELOPMENT
- HAA 1025 - HISTORY AND ETHICS OF COLLECTING
- HAA 1905 - MUSEUMS STUDIES INTERNSHIP

Note

The Academic Curator of the Department of History of Art and Architecture will work with Museum Studies minors to place them into internship positions that are approved to satisfy the minor requirement.

One of the following courses

- ANTH 0582 - INTRODUCTION TO ARCHEOLOGY
- ANTH 0780 - INTRODUCTION TO CULTURAL ANTHROPOLOGY
- ANTH 1541 - CULTURAL RESOURCE MANAGEMENT
- CLASS 0600 - INTRODUCTION TO MEDITERRANEAN ARCHAEOLOGY
- HAA 1030 - SPECIAL TOPICS- MUSEUM HISTORIES
- INFSCI 0010 - INTRODUCTION TO INFORMATION, SYSTEMS AND SOCIETY

Department of History and Philosophy of Science

Certificate

Conceptual Foundations of Medicine Certificate

This certificate requires completion of at least 18 credits. Students enrolled in the program are expected to achieve at least a letter grade of C in each required course. Those intertested in pursuing this certificate must apply to the program as early as possible. Applications are available on the certificate's Web page, www.hps.pitt.edu/undergraduate/certificate.php.

Core courses

- HPS 0612 - MIND AND MEDICINE

- HPS 0613 - MORALITY AND MEDICINE

Biological Sciences courses

A two-term, college level course sequence in biology, such as BIOSC 0150 BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1 and BIOSC 0160 BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2 are required for this certificate.

Additional coursework

Two additional approved courses in two different departments dealing with social and conceptual issues in the biomedical sciences are required for this certificate. A list of such approved courses is available in the Department of History of Philosophy and Science prior to each term. Courses are approved on a term-by-term basis.

Other requirements

Grade Requirements: Students are expected to achieve a minimum grade of C in each course required for this certificate. A minimum overall GPA of 2.25 is required in courses required for this certificate.

Satisfactory/No Credit Option: No course that fulfills a requirement for this certificate may be taken on an S/NC basis.

Jewish Studies Program

The Jewish Studies Program, an interdisciplinary program in the School of Arts and Sciences, offers courses and academic programs devoted to the exploration of Jewish history, culture, religion, thought, and literary and artistic expression. Faculty is drawn from the departments of Religious Studies, Anthropology, English, French and Italian Languages and Literatures, German, History, and Political Science.

Certificate

Jewish Studies Certificate

The Jewish Studies Program is open to all students interested in the Hebrew language and the history and culture of the Jewish people and their contributions to Western civilization. In the historical courses, emphasis is on the interaction of the Jewish people with their neighbors, as well as the development of distinctive cultural and religious values. A certificate program is offered, and interdisciplinary studies options can be arranged to include courses in this program. Information is also available on opportunities for intensive study in Israel. The program in Jewish studies offers undergraduates the opportunity to supplement work in their own department or major with an interdisciplinary course of study in the area of Jewish studies. Completion of the certificate program fulfills the Arts and Sciences requirement for a related area (although students should check with their major departments) and will be indicated on the transcript.

Requirements

The certificate requires 18 credits. A maximum of nine credits may be transferred from another institution, subject to the DietrichSchool of Arts and Sciences policy. Credits are to be distributed as follows.

Elementary Hebrew courses are optional.

- JS 0013 - ELEMENTARY HEBREW 1
- JS 0014 - ELEMENTARY HEBREW 2

Required Hebrew course

- JS 0025 - INTERMEDIATE HEBREW 3

Upper-level Jewish Studies courses

Students must complete six credits in Jewis Studies Program courses at the 1000-level.

Jewish Studies elective courses

Students may take up to nine credits in any other Jewis Studies Program courses.

Comparative Religious Studies course

Students must take at least one course in the Department of Religious Studies that treats a religious tradition other than Judaism.

Independent Study

- JS 1901 - INDEPENDENT STUDY

Department of Linguistics

Linguistics is concerned with the study of language as a core property of human cognition and interaction. It is a broad field that straddles the humanities, social sciences, and natural sciences. Major areas of study in linguistics include the following fields:

- Applied linguistics: second-language learning theory, literacy, bilingual education
- Computational linguistics: natural language generation, knowledge representation and artificial intelligence, recognition of systems
- Theoretical linguistics: development of psychologically plausible models of language sound systems, word structure, sentence and discourse structure, meaning
- Historical and comparative linguistics: study of language history, both language change and relationships among languages
- Descriptive-anthropological linguistics: documentation and analysis of languages, especially little-known languages through field work
- Psycholinguistics: research on such topics as sentence processing, problems in reading, how children acquire their first language (childhood language acquisition)
- Sociolinguistics: study of language use and socially controlled variation in form, conversation and narrative discourse, social trends reflected in language use, political aspects of language use

Careers in linguistics include teaching English as a second language and other languages including American Sign Language; computational linguistic research in industry and public agencies; field research on endangered languages and cultures; research and teaching at the university level; careers in publishing and advertising; speech pathology and rehabilitation; translation and interpreting; law; and governmental consulting on language policies. Most careers in linguistics require graduate training.

Many, but certainly not all, people come to linguistics through a love of languages. However, love of languages itself is not sufficient to ensure success and happiness as a linguistics major. The student must also enjoy analytical thought, as linguists employ analytical tools in the study of human languages. Students considering a major in linguistics should take the introductory linguistics course (LING 1950 - INTRODUCTION TO LINGUISTICS) at their earliest opportunity to help gauge if the major is right for them. The linguistics major gives students a solid foundation in the central areas of linguistic theory and analysis. The structure of human language (its sounds, word structures, and syntax) is the focus of the linguistics courses required for the major. In addition, the major's language requirement is designed to make sure students acquire a perspective on linguistic structures besides those of their native language and at least some exposure to one language that is structurally very unlike English. For more information on the major or the Department of Linguistics, see www.linguistics.pitt.edu.

Major

Linguistics, BA

The Department of Linguistics is known internationally for its strength in the areas of second language acquisition, applied linguistics, TESOL, and American Indian languages. Like many linguistics programs in the United States, the department is centrally concerned with core areas of linguistic theory. It also emphasizes the importance of the applied and descriptive endeavors. The areas of expertise of the faculty are theoretical and descriptive linguistics, Hispanic linguistics, sociolinguistics, psycholinguistics, and second language acquisition. The department prides itself on its collegial atmosphere and close cooperation between faculty and students.

A major in linguistics gives students a solid foundation in the central areas of linguistic theory and analysis. The structure of human language (its sounds, word structures, and syntax) is the focus of the linguistics courses required for the major. Additionally, the major's language requirement ensures that students acquire a perspective on linguistic structures outside of their native language, and that they receive some exposure to at least one

language that is structurally unlike English. Students considering a major in linguistics should take LING 1000 - INTRODUCTION TO LINGUISTICS at their earliest opportunity to gauge if the major is right for them.

In addition to formal instruction provided by the department, students are encouraged to take courses in related departments such as anthropology and psychology. Students who wish to combine their work in linguistics with training in a specific cultural area may simultaneously earn a certificate in Asian, Latin American, Russian and East European, West European, or European Union Studies through the University Center for International Studies (UCIS). The department is also home to the English Language Institute, the Robert Henderson Language Media Center, and the Less-Commonly-Taught Languages Center.

Careers in linguistics include teaching English as a second language and teaching other languages including American Sign Language; computational linguistics research in industry and public agencies; field research on endangered languages and cultures; research and teaching at the university level; careers in publishing and advertising; speech pathology and rehabilitation; translation and interpreting; law; and governmental consulting on language policies. Most careers in linguistics require graduate training.

The major in Linguistics requires 30 credits of coursework, distributed as follows.

Core courses

Complete all of the following courses.

- LING 1000 - INTRODUCTION TO LINGUISTICS
- LING 1578 - PHONETICS AND PHONEMICS
- LING 1579 - PHONOLOGY
- LING 1773 - MORPHOLOGY
- LING 1777 - SYNTACTIC THEORY

Language, Linguistics, or Semantics

Complete one of the following courses.

- LING 1267 - ASPECTS OF SOCIOLINGUISTICS
- LING 1580 - LANGUAGE AND THE MIND
- LING 1682 - INTRODUCTION TO SEMANTIC THEORY
- LING 1860 - INTRO TO HISTORICAL LINGUISTICS

Research or Field Methods

Complete one of the following courses.

- LING 1441 - FIELD METHODS IN LINGUISTICS
- LING 2144 - RESEARCH METHODS IN APPLIED LINGUISTICS

Capstone course

Complete one of the following courses.

- LING 1903 - DIRECTED RESEARCH
- LING 1930 - APPLICATIONS OF LINGUISTICS

Elective courses

Students are required to complete two LING 1000-level elective courses.

Language courses

Students are required to complete one semester of language study that is not Romance (including Latin), Germanic, Balto-Slavic, or Greek. This requirement is in addition to the two terms of language study required of students who are not exempt from the second language requirement for the Dietrich School of Arts and Sciences.

Other requirements and conditions

Grade requirements: A minimum GPA of 2.0 in departmental courses is required for graduation.

Satisfactory/No Credit option: No more than two LING courses that count toward the major can be taken on an S/NC basis.

Writing (W) requirement: Students must complete at least one W-course in the major.

Minor

Hindi Minor

This minor requires 17 credits of coursework to complete.

Language courses

- HINDI 0101 - HINDI 1
- HINDI 0102 - HINDI 2
- HINDI 0103 - HINDI 3
- HINDI 0104 - HINDI 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Hindi or South Asia may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- HINDI 0105 Hindi 5
- HINDI 0106 HIndi 6
- HINDI 1909 - SPECIAL TOPICS IN HINDI
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- ANTH 0730 - HIMALAYAN GEOGRAPHY
- ANTH 1764 - CULTURES AND SOCIETIES OF INDIA
- ANTH 1801 - HIMALAYAN BIODIVERSITY
- ENGFLM 1410 - BOLLYWOOD AND INDIAN CINEMA
- HIST 0755 - RELIGION IN ASIA
- HIST 1707 - GENDER IN GLOBAL HISTORY
- HIST 1757 - RELIGION IN INDIA
- HIST 1758 - HINDU MYTHOLOGY
- RELGST 0505 - RELIGION IN ASIA
- RELGST 1510 - HINDU MYTHOLOGY

Hungarian Minor

The Hungarian minor requires 17 credits for completion, described as follows.

Students taking Hungarian learn to speak, listen, read and write in the language, just as students in other language courses do. In addition, students of Hungarian stand out as individuals with a rare skill, which may put them at an advantage for future job opportunities. Students pursuing this minor may also be interested in the Russiand and Eastern Europe or the European Union Studies certificates offered by the University Center for International Studies.

Required courses

Students must complete the following language courses.

Elective course

Students must complete one of the following courses. Optionally, a student may seek approval from the Less-Commonly-Taught Languages Center to substitute a course in another department that has at least a 25% on Hungary or Hungarian culture.

- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- ENGLIT 0380 - SLOVAK TRANSATLANTIC CULTURES
- ENGFLM 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES
- HIST 0200 - EAST CENTRAL EUROPE
- HIST 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES
- MUSIC 1360 - ROMANI / GYPSY MUSIC
- PS 1521 - EASTERN EUROPE IN WORLD POLITICS
- SLAV 1865 - THE YEAR COMMUNISM CRUMBLED
- SLOVAK 0380 - SLOVAK TRANSATLANTIC CULTURES

Irish Minor

This minor requires 17 credits of coursework to complete.

Language courses

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Irish or Ireland may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- IRISH 0105 - IRISH (GAEILGE) 5
- IRISH 0106 - IRISH (GAEILGE) 6
- IRISH 1615 - IRISH CULTURE AND TRADITIONS
- IRISH 1909 - SPECIAL TOPICS IN IRISH
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- ENGFLM 1192 - IRISH FILM
- ENGLIT 0815 - IRISH LITERATURE
- HIST 0150 - HISTORY OF MODERN IRELAND
- HIST 1016 - THE IRISH IN AMERICA
- HIST 1124 - NORTHERN IRELAND: THE TROUBLES - 1969-1994

Linguistics Minor

An minor in linguistics would be particularly useful for students majoring in English, second languages, philosophy, anthropology, psychology, sociology, communications, speech science, neuroscience, computer science, and information science, as well as for students with an interest in teaching English as a second language, going to law school, or otherwise choosing a profession in which language plays a crucial part.

Academic Requirements

The minor consists of 15 credits and comprises the following courses:

- LING 1578 - PHONETICS AND PHONEMICS

- LING 1777 - SYNTACTIC THEORY
- Two electives, chosen from the linguistics courses at the 1000 level (e.g., Phonology, Morphology, Historical Linguistics, Aspects of Sociolinguistics, Introduction to Applied Linguistics)

Modern Greek Minor

This minor requires 17 credits of coursework to complete.

Language courses

- GREEKM 0101 - GREEK (MODERN) 1
- GREEKM 0102 - GREEK (MODERN) 2
- GREEKM 0103 - GREEK (MODERN) 3
- GREEKM 0104 - GREEK (MODERN) 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Modern Greek, Greece, or Cyprus may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- GREEKM 0105 - GREEK (MODERN) 5
- GREEKM 0106 - GREEK (MODERN) 6
- GREEKM 1615 - THE GREEKS: JOURNEY THROUGH CULTURE
- GREEKM 1909 - SPECIAL TOPICS IN MODERN GREEK
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- CLASS 0010 - GREEK CIVILIZATION
- CLASS 0030 - MYTHOLOGY IN THE ANCIENT WORLD
- CLASS 0032 - ATHLETICS OF THE ANCIENT WORLD
- CLASS 1130 - CLASSICAL MYTHOLOGY AND LITERATURE
- CLASS 1210 - GREEK HISTORY
- CLASS 1510 - GREEK ART
- CLASS 1630 - MARGINALITY IN THE ANCIENT GREEK WORLD
- ECON 1680 - ECONOMICS OF THE EUROPEAN UNION
- HAA 1110 - GREEK ART
- HIST 1164 - SMALL COUNTRIES AND THE EUROPEAN UNION
- HIST 1783 - GREEK HISTORY
- RELGST 0083 - MYTHOLOGY IN THE ANCIENT WORLD
- RELGST 1135 - ORTHODOX CHRISTIANITY

Persian/Farsi Minor

This minor requires 17 credits of coursework to complete.

Language courses

- PERS 0101 - PERSIAN (FARSI) 1
- PERS 0102 - PERSIAN (FARSI) 2
- PERS 0103 - PERSIAN (FARSI) 3
- PERS 0104 - PERSIAN (FARSI) 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Persian, Farsi, or Iran may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- PERS 0105 - PERSIAN (FARSI) 5
- PERS 0106 - PERSIAN (FARSI) 6
- PERS 0107 - PERSIAN (FARSI) 7
- PERS 0108 - PERSIAN (FARSI) 8
- PERS 1905 - UNDERGRADUATE TEACHING ASSISTANT IN PERSIAN (FARSI)
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- HIST 0752 - EMPIRES OF THE STEPPE: EURASIA FROM THE MONGOLS TO THE SOVIET UNION
- HIST 0756 - INTRODUCTION TO ISLAMIC CIVILIZATION
- RELGST 0455 - INTRODUCTION TO ISLAMIC CIVILIZATION

Quechua Minor

This minor requires 17 credits of coursework to complete.

Language courses

- QUECH 0101 - QUECHUA 1
- QUECH 0102 - QUECHUA 2
- QUECH 0103 - QUECHUA 3
- QUECH 0104 - QUECHUA 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Quechua or the Andes may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- QUECH 0105 Quechua 5
- QUECH 0106 Quechua 6
- QUECH 1909 - SPECIAL TOPICS IN QUECHUA
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- ANTH 1528 - SOUTH AMERICAN ARCHAEOLOGY
- ANTH 1543 - ANCIENT STATES IN THE NEW WORLD
- HIST 0500 - COLONIAL LATIN AMERICA
- HIST 0501 - MODERN LATIN AMERICA
- HIST 1511 - VIOLENCE & MEMORY IN LATIN AMERICA

Swahili Minor

This minor requires 17 credits of coursework to complete.

Language courses

- SWAHIL 0101 - SWAHILI 1
- SWAHIL 0102 - SWAHILI 2
- SWAHIL 0103 - SWAHILI 3
- SWAHIL 0104 - SWAHILI 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Swahili or East Africa may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- SWAHIL 0105 - SWAHILI 5
- SWAHIL 0106 - SWAHILI 6
- SWAHIL 0107 - SWAHILI 7
- SWAHIL 0108 - SWAHILI 8
- SWAHIL 0111 - INTRODUCTION TO SWAHILI LANGUAGE ABROAD
- SWAHIL 1615 Swahili Coastal Culture: Gateway to Africa
- SWAHIL 1909 - SPECIAL TOPICS IN SWAHILI
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- AFRCNA 0127 - INTRODUCTION TO AFRICA
- AFRCNA 1725 - SOCIAL AND HEALTH ISSUES IN EAST AFRICA
- ANTH 1725 - SOCIAL AND HEALTH ISSUES IN EAST AFRICA
- HIST 1727 East African History 1500-Present

Swedish Minor

This minor requires 17 credits of coursework to complete.

Language courses

- SWE 0101 - SWEDISH 1
- SWE 0102 - SWEDISH 2
- SWE 0103 - SWEDISH 3
- SWE 0104 - SWEDISH 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Swedish or Sweden may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- SWE 0105 - SWEDISH 5
- SWE 0106 - SWEDISH 6
- SWE 1615 - SWEDEN - FROM VIKINGS TO NOW
- SWE 1909 - SPECIAL TOPICS IN SWEDISH
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- HIST 0139 - VIKING AGE SCANDINAVIA
- HIST 0201 - THE BALTIC SEA: FROM THE VIKINGS TO POST-SOVIET RE-UNION

Turkish Minor

This minor requires 17 credits of coursework to complete.

Language courses

- TURKSH 0101 - TURKISH 1
- TURKSH 0102 - TURKISH 2
- TURKSH 0103 - TURKISH 3
- TURKSH 0104 - TURKISH 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Turkish or Turkey may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- TURKSH 0105 - TURKISH 5
- TURKSH 0106 - TURKISH 6
- TURKSH 0107 - TURKISH 7
- TURKSH 0108 - TURKISH 8
- TURKSH 1615 - TURKISH CULTURE AND SOCIETY
- TURKSH 1909 - SPECIAL TOPICS IN TURKISH
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- HIST 0752 - EMPIRES OF THE STEPPE: EURASIA FROM THE MONGOLS TO THE SOVIET UNION
- HIST 0756 - INTRODUCTION TO ISLAMIC CIVILIZATION
- HIST 1175 - XENOPHOBIA IN MODERN EUROPE
- HIST 1753 - THE OTTOMAN EMPIRE (1300-1923)
- RELGST 0455 - INTRODUCTION TO ISLAMIC CIVILIZATION
- PS 1348 - XENOPHOBIA IN MODERN EUROPE

Vietnamese Minor

This minor requires 17 credits of coursework to complete.

Language courses

- VIET 0101 - VIETNAMESE 1
- VIET 0102 - VIETNAMESE 2
- VIET 0103 - VIETNAMESE 3
- VIET 0104 - VIETNAMESE 4

Electives

Choose one course from the following list. Other courses that focus at least 25% effort on Vietnamese or Vietnam may fulfill this requirement with approval from the Less-Commonly-Taught Languages Center.

- VIET 0105 Vietnamese 5
- VIET 0106 Vietnamese 6
- VIET 1909 - SPECIAL TOPICS IN VIETNAMESE
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- LING 1951 - LANGUAGES OF THE WORLD
- HIST 0403 - HISTORY OF MODERN SOUTHEAST ASIA: COLONIAL ERA TO PRESENT

Certificate

American Sign Language Certificate

The Department of Linguistics offers an undergraduate Certificate in American Sign Language (ASL). This certificate program should lead students to: a high degree of proficiency in ASL; an understanding of the structure of ASL as a visual/gestural language; and an understanding of important issues in deaf culture and education.

This certificate program could conveniently accompany various undergraduate majors including, but not limited to, linguistics, communication science, and various undergraduate disciplines that serve as the basis for graduate-level degrees and certificates in the University of Pittsburgh School of Education. The program draws on the academic strengths and resources of the Department of Linguistics in the Faculty of Arts and Sciences and the Department of Instruction and Learning in the School of Education.

Currently, there is a limit of 20 students per academic year who can enroll in the ASL certificate program. For this reason, each applicant will be required to go through an evaluation process. Applications are accepted early during the spring term of each academic year, and students will be

notified of their acceptance or non-acceptance into the program before registering for fall classes. Please contact the Less-Commonly-Taught Languages Center, CL G-47, for application packets or more information (lctl@pitt.edu, 412-624-5512).

Requirements

Prerequisites

Students must pass the prerequisite courses with a letter grade of B or higher.

- ASL 0101 - AMERICAN SIGN LANGUAGE 1
- ASL 0102 - AMERICAN SIGN LANGUAGE 2

Required courses (18 credits)

Category 1

- ASL 0103 - AMERICAN SIGN LANGUAGE 3
- ASL 0104 - AMERICAN SIGN LANGUAGE 4

Category 2

- ASL 1615 - DEAF CULTURE

Category 3

Students must complete one of the following courses.

- LING 1000 - INTRODUCTION TO LINGUISTICS
- CSD 1020 - NATURE OF LANGUAGE

Category 4

Students must complete one of the following courses.

- ASL 1705 - STRUCTURE OF SIGN LANGUAGES
- ASL 1715 - STRUCTURE OF ASL AND ENGLISH

Category 5

Students must complete one of the following courses.

- ASL 1635 - ANALYSES OF ASL LITERATURE
- ASL 1725 - SOCIOLINGUISTICS OF SIGN LANGUAGE
- ASL 1800 - INTRODUCTION TO ASL-ENGLISH INTERPRETING
- ASL 1909 - TOPICS IN SIGN LANGUAGE STUDIES

Other requirements

Grade Requirements: A minimum GPA of 2.0 is required in each course that counts toward the certificate.

Satisfactory/No Credit Option: There is no limit to the number of courses that can be taken on the S/NC basis for this certificate. The two prerequisite courses must be taken for a letter grade.

Arabic Language and Linguistics Certificate

The Department of Linguistics offers an undergraduate certificate in Arabic Language and Linguistics. This certificate program should lead students to:

- an intermediate to advanced proficiency in Modern Standard Arabic (formal Arabic) and at least one Arabic dialect;
- an understanding of the linguistic structure of Arabic;
- an understanding of important issues in Arabic literature and culture; and
- exposure to authentic Arabic reading and listening materials, and discussion of general topics of interest in the Arab world in Arabic.

The certificate program could conveniently accompany several undergraduate majors including, but not limited to, linguistics, political science, communication science, and various undergraduate disciplines that serve as the basis for graduate-level degrees and certificates in the schools of education, law, and others.

Students who are interested in the Arabic Language and Linguistics Certificate can apply for the program after they complete the prerequisites for the certificate which is the completion of two semesters of the language with an average B grade or higher. However, students could also apply for the certificate any time before their graduation if they complete the requirements by then. Contact the Arabic coordinator, Amani Attia (ama66@pitt.edu) for advice on course planning, and to submit the application packet, which consists of three forms to be filled out by candidates. This certificate requires 32-34 credits for completion.

Prerequisite dialect courses

Students must complete two semesters of Modern Standard Arabic in one dialect - Egyptian or Levantine, with a letter grade of B or higher to declare the certificate. In addition to the prerequisite courses, the certificate requires 22-23 credits of course work as described.

Choose one of the following pairs of courses.

Egyptian

- ARABIC 0101 - MODERN STANDARD ARABIC 1/EGYPTIAN 1
- ARABIC 0102 - MODERN STANDARD ARABIC 2/EGYPTIAN 2

Levantine

- ARABIC 0121 - MODERN STANDARD ARABIC 1/LEVANTINE 1
- ARABIC 0122 - MODERN STANDARD ARABIC 2/LEVANTINE 2

Required Courses:

Two additional courses in the same dialect

In some cases, students could change from one dialect track to the other, based on study abroad needs, schedule conflicts, or other factors. The student must show a certain level of proficiency in the target dialect. Contact Arabic coordinator (ama66@pitt.edu) for advice on this issue.

Egyptian

- ARABIC 0103 - MODERN STANDARD ARABIC 3/EGYPTIAN 3
- ARABIC 0104 - MODERN STANDARD ARABIC 4/EGYPTIAN 4

Levantine

- ARABIC 0123 - MODERN STANDARD ARABIC 3/LEVANTINE 3
- ARABIC 0124 - MODERN STANDARD ARABIC 4/LEVANTINE 4

Intoductory linguistics courses

- ARABIC 1705 - INTRODUCTION TO ARABIC LINGUISTICS

- LING 1000 - INTRODUCTION TO LINGUISTICS

Arabic culture course

Students must complete one of the following courses.

- ARABIC 1615 - ARABIC LIFE AND THOUGHT
- ARABIC 1635 - INTRODUCTION TO MODERN ARABIC LITERATURE

Arabic related elective

Students must complete one of the following courses. Dialect courses must follow previous coursework.

- ARABIC 0105 - MODERN STANDARD ARABIC 5/EGYPTIAN 5
- ARABIC 0106 - MODERN STANDARD ARABIC 6/EGYPTIAN 6
- ARABIC 0125 - MODERN STANDARD ARABIC 5/LEVANTINE 5
- ARABIC 0126 - MODERN STANDARD ARABIC 6/LEVANTINE 6
- ARABIC 1615 - ARABIC LIFE AND THOUGHT
- ARABIC 1635 - INTRODUCTION TO MODERN ARABIC LITERATURE
- ARABIC 1909 - SPECIAL TOPICS IN ARABIC
- ECON 0640 - ECONOMIC DEVELOPMENT OF THE MIDDLE EAST AND NORTH AFRICA (MENA) REGION
- HIST 0756 - INTRODUCTION TO ISLAMIC CIVILIZATION or
- RELGST 0455 - INTRODUCTION TO ISLAMIC CIVILIZATION
- PS 1351 - GOVERNMENT AND POLITICS OF THE MIDDLE EAST

Department of Mathematics

The Department of Mathematics offers course work leading to a Bachelor of Science degree in mathematics as well as various courses for non-majors. Students concentrating in mathematics may pursue majors in mathematics, applied mathematics, actuarial mathematics, or mathematical biology, or they may pursue a joint major in mathematics and economics. Each of the department's majors has its own philosophy and its own formal requirements, so students should consult with a major advisor. For more information on these majors and the Department of Mathematics, see www.mathematics.pitt.edu.

Major

Actuarial Mathematics, BS

Students wishing to pursue a major in Actuarial Mathematics must complete both MATH 0220 and MATH 0230 or their equivalents with a letter grade of C or better before declaring actuarial mathematics as their major. Students will be required to take 63 credits, of which 46 will be in Mathematics and Statistics. Specific requirements are:

Prerequisites

Complete both of the following courses.

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2

Basic Calculus

Choose one of the following courses.

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0245 - HONORS 1- MULTIVARIABLE CALCULUS

Analysis

Choose one of the following courses.

- MATH 0413 - INTRO THEORETICAL MATHEMATICS
- MATH 0450 - INTRODUCTION TO ANALYSIS

Linear algebra

Choose one of the following courses.

- MATH 1180 - LINEAR ALGEBRA 1
- MATH 1185 - HONORS LINEAR ALGEBRA

Differential Equations

Choose one of the following courses.

- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1
- MATH 1275 - HONORS ORDINARY DIFFERENTIAL EQUATIONS 1

Actuarial Mathematics

Complete all of the following courses.

- MATH 0470 - ACTUARIAL MATHEMATICS 1
- MATH 1119 - APPLIED PROBABILITY FOR ACTUARIAL MATHEMATICS
- MATH 1121 - ACTUARIAL MATHEMATICS 2
- MATH 1122 - ACTUARIAL MATHEMATICS 3
- MATH 1123 - ACTUARIAL MATHEMATICS 4
- MATH 1124 - ACTUARIAL MATHEMATICS 5
- MATH 1125 - ABSTRACT ALGEBRA
- MATH 1126 - PREDICTIVE ANALYTICS 1

Numerical Methods

Choose one of the following courses.

- MATH 1070 - NUMERICAL MATHEMATICAL ANALYSIS
- MATH 1080 - NUMERICAL MATH: LINEAR ALGEBRA
- MATH 1127 - PREDICTIVE ANALYTICS 2

Applied Mathematics

Choose two of the following courses.

- MATH 1100 - LINEAR PROGRAMMING
- MATH 1110 - INDUSTRIAL MATHEMATICS (writing-intensive course)
- MATH 1280 - ORDINARY DIFFERNTL EQUATIONS 2
- MATH 1360 - MODELING IN APPLIED MATH 1
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1530 - ADVANCED CALCULUS 1
- MATH 1540 - ADVANCED CALCULUS 2
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS

Economics

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Computer Programming

Choose one of the following courses.

- CS 0004 - INTRODUCTION TO COMPUTER PROGRAMMING-BASIC
- CS 0007 - INTRODUCTION TO COMPUTER PROGRAMMING
- CS 0008 - INTRODUCTION TO COMPUTER PROGRAMMING WITH PYTHON
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- STAT 1301 - STATISTICAL PACKAGES
- BUSBIS 1060 - INTRODUCTION TO INFORMATION SYSTEMS
- ENGR 0012 - INTRO TO ENGINEERING COMPUTING

Statistics

- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Analysis

Choose one of the following courses.

- ECON 1150 - APPLIED ECONOMETRICS 1
- STAT 1221 - APPLIED REGRESSION

Time Sequence

Choose one of the following courses.

- STAT 1321 - APPLIED TIME SERIES
- STAT 1731 - STOCHASTIC PROCESSES
- STAT 1741 - APPLIED PROBABILITY THEORY

Finance

Choose one of the following courses.

- BUSFIN 1311 - CORPORATE FINANCE
- ECON 1440 - ECONOMICS OF CORPORATION FINANCE

Additional Requirements

- **Declaring the major:** Before declaring this major, students must complete MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2 or MATH 0235 - HONORS 1 - VARIABLE CALCULUS , or their equivalents, with a letter grade of C or better. Additionally, Students must complete MATH 0470 - ACTUARIAL MATHEMATICS 1 with a letter grade of B or better to declare this major.
- **Grade requirements:** A letter grade of C or higher is necessary in all courses required for the major.
- **Satisfactory/No Credit option:** No course that counts toward the major can be taken on the Satisfactory/No Credit (S/NC) basis.
- **Writing (W) requirement:** Students must complete at least one writing-intensive course (W-course) in the major. MATH 1110 - INDUSTRIAL MATHEMATICS is a W-course option for this major.

Applied Mathematics, BS

Students majoring in Applied Mathematics must complete 40 credits in mathematics, distributed as follows. Since different program emphases are possible, students should consult the advisor as early as possible in regards to selection of courses:

Calculus

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

Introductory theoretical course

- MATH 0413 - INTRO THEORETICAL MATHEMATICS
- MATH 0420 - INTRO THEORY 1-VARIABLE CALCULUS

Upper-level required courses

One of the following courses

- MATH 1180 - LINEAR ALGEBRA 1
- MATH 1185 - HONORS LINEAR ALGEBRA

One of the following courses

- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1
- MATH 1275 - HONORS ORDINARY DIFFERENTIAL EQUATIONS 1

Numerical Mathematics:

choose one of the following courses

- MATH 1070 - NUMERICAL MATHEMATICAL ANALYSIS
- MATH 1080 - NUMERICAL MATH: LINEAR ALGEBRA
- MATH 1100 - LINEAR PROGRAMMING
- MATH 1101 - AN INTRODUCTION TO OPTIMIZATION
- MATH 1110 - INDUSTRIAL MATHEMATICS

Applied Analysis:

choose one of the following courses

- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- MATH 1570 - INTRODUCTION TO FOURIER ANALYSIS

Differential Equations:

choose one of the following courses

- MATH 1280 - ORDINARY DIFFERNTL EQUATIONS 2
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1

One of the following courses

- MATH 1110 - INDUSTRIAL MATHEMATICS
- MATH 1360 - MODELING IN APPLIED MATH 1
- MATH 1370 - INTRODUCTION TO COMPUTATIONAL NEUROSCIENCE
- MATH 1380 - MATH BIOLOGY

Physics courses

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Computer Science:

choose one of the following courses

- CS 0007 - INTRODUCTION TO COMPUTER PROGRAMMING
- CS 0008 - INTRODUCTION TO COMPUTER PROGRAMMING WITH PYTHON
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA

Statistics:

choose one of the following courses

- MATH 1510 - MATHEMATICAL THEORY OF PROBABILITY
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT
- STAT 1151 - INTRODUCTION TO PROBABILITY

Other Requirements and Recommendations

- Students interested in graduate study are strongly advised to take MATH 1530 - ADVANCED CALCULUS 1 and MATH 1540 - ADVANCED CALCULUS 2. These two courses may be substituted for the Applied Analysis and the Differential Equations courses, respectively.
- Students interested in pursuing secondary education certification should take the following courses in addition to the courses required for the major.
    - MATH 0430 MATH 0430 - INTRO ABSTRACT ALGEBRAIC SYSTEMS
    - MATH 1020 MATH 1020 - APPLIED ELEMENTARY NUMBER THEORY
    - MATH 1230 MATH 1230 - THE BIG IDEAS OF MATHEMATICS
    - MATH 1290 MATH 1290 - TOPICS IN GEOMETRY
- A grade of C or higher is necessary in all courses required for the major. A minimum GPA of 2.0 in departmental courses is required for graduation.
- Students must complete at least one writing-intensive course (W-course) in the major.
- No course that counts toward the major may be taken on the S/NC basis.
- Eligible courses are list on the right side of this sheet and should be chosen in consultation with the major advisor.
- Students must complete minimum of 12 credits of related coursework within the major; subjects include chemistry, computer science, economics, physics, statistics, and certain areas of engineering. These courses should be chosen in consultation with the major advisor.
- Honors in Applied Mathematics is granted if the student:
    - Completes all requirements for the major
    - Completes the following courses with a letter grade of B or higher:
        - MATH 1470 MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
        - MATH 1530 MATH 1530 - ADVANCED CALCULUS 1
        - MATH 1540 MATH 1540 - ADVANCED CALCULUS 2
        - A 2000-level course in lieu of a 1000-level elective
    - Completes an honors thesis under the direction of a member of the Department of Mathematics faculty, or completes a 2000-level course in lieu of the honors thesis.
- The statistics requirement is waived for students seeking honors in Applied Mathematics.

Mathematical Biology, BS

Mathematics has assumed a significant role in the study of biological systems, in the development of biotechnology, and in advances in medicine. The construction and analysis of mathematical models of biological systems allows for the precise formulation of theoretical ideas, the testing of assumptions that may not be easily accessible experimentally, and the generation of novel predictions that can guide future research. The University of Pittsburgh is known for its excellence in biomedical research, and the Department of Mathematics at Pitt includes prominent faculty with strong records of teaching and research in mathematical biology.

The major in Mathematical Biology will help students develop an expertise in thinking mathematically about biological systems. Students will acquire fundamental skills in mathematical analysis and simulation, specialized experience in mathematical modeling in biology and neuroscience, and knowledge of particular areas of biology. These tools will prepare students to participate in undergraduate research and to go on to use quantitative methods in biotechnology, medicine, and other fields.

Requirements

The Mathematical Biology major will require the completion of 43 credits in mathematics.

Calculus courses

All three of the following courses are required.

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

Introductory theoretical courses

Both of the following courses are required. Qualified students may substitute MATH 0450 - INTRODUCTION TO ANALYSIS for MATH 0413 and MATH 0420.

- MATH 0413 - INTRO THEORETICAL MATHEMATICS
- MATH 0420 - INTRO THEORY 1-VARIABLE CALCULUS

Linear Algebra

Choose one of the following courses.

- MATH 1180 - LINEAR ALGEBRA 1
- MATH 1185 - HONORS LINEAR ALGEBRA

Differential Equations

Choose one of the following courses.

- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1
- MATH 1275 - HONORS ORDINARY DIFFERENTIAL EQUATIONS 1

Mathematical biology courses

Both of the following courses are required.

- MATH 1370 - INTRODUCTION TO COMPUTATIONAL NEUROSCIENCE
- MATH 1380 - MATH BIOLOGY

Numerical mathematics courses

Both of the following courses are required.

- MATH 1070 - NUMERICAL MATHEMATICAL ANALYSIS

- MATH 1080 - NUMERICAL MATH: LINEAR ALGEBRA

Applied analysis courses

Choose two courses from the following list.

- MATH 1280 - ORDINARY DIFFERNTL EQUATIONS 2
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1530 - ADVANCED CALCULUS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS

Introductory biology courses

Both of the following courses are required.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2

Biology or Neuroscience courses

Choose two of the following courses. At least one of the chosen courses must be at the 1000 level.

- BIOSC 0350 - GENETICS or
- BIOSC 0355 - UHC GENETICS

- BIOSC 0370 - ECOLOGY
- BIOSC 1000 - BIOCHEMISTRY

- BIOSC 1070 - HUMAN PHYSIOLOGY-UHC or
- BIOSC 1250 - HUMAN PHYSIOLOGY or
- BIOSC 1870 - ANIMAL PHYSIOLOGY

- BIOSC 1130 - EVOLUTION
- BIOSC 1320 - POPULATION BIOLOGY
- BIOSC 1470 - BIOPHYSICAL CHEMISTRY
- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1520 - DEVELOPMENTAL BIOLOGY
- BIOSC 1540 - COMPUTATIONAL BIOLOGY
- BIOSC 1760 - IMMUNOLOGY

- NROSCI 1000 - INTRO TO NEUROSCIENCE or
- NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE

- NROSCI 1011 - FUNCTIONAL NEUROANATOMY
- NROSCI 1012 - NEUROPHYSIOLOGY
- NROSCI 1017 - SYNAPTIC TRANSMISSION
- NROSCI 1034 - NEURAL BASIS OF COGNITION

Statistics course

Choose one of the following courses.

- MATH 1510 - MATHEMATICAL THEORY OF PROBABILITY
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

Other Requirements and Recommendations

Students pursuing the Mathematical Biology major are encouraged to take CHEM 0110 - GENERAL CHEMISTRY 1 and CHEM 0120 - GENERAL CHEMISTRY 2, as these courses will satisfy the Dietrich School of Arts and Sciences breadth requirement in natural science and will expand their biology and neuroscience course options. Several of the BIOSC courses that fulfill requirements for this major have prerequisites, but some do not have prerequisites. PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED) also carry a high degree of relevance for Mathematical Biology majors.

- Mathematical Biology students who plan to continue in graduate studies are advised to take advanced calculus, MATH 1530 - ADVANCED CALCULUS 1 and MATH 1540 - ADVANCED CALCULUS 2. MATH 1370 - INTRODUCTION TO COMPUTATIONAL NEUROSCIENCE and MATH 1380 - MATH BIOLOGY introduce students to techniques for independent research; students in these courses are encouraged to pursue research opportunities in Mathematical Biology that are available locally and nationally.
- A grade of C or higher is necessary in all courses required for the major. A minimum GPA of 2.0 in departmental courses is required for graduation.
- No course that counts toward the major may be taken on the S/NC basis.
- Students must complete at least one writing-intensive course (W-course) in the major. Either MATH 0413 or MATH 0450 will satisfy this requirement.
- Students seeking honors in Mathematical Biology will earn departmental honors if they meet the following requirements.
    - Fulfill all requirements for the major.
    - Complete the following courses with a letter grade of A- or better.
        - MATH 1370 - INTRODUCTION TO COMPUTATIONAL NEUROSCIENCE
        - MATH 1380 - MATH BIOLOGY
    - Complete the following courses with a letter grade of B or higher.
        - MATH 1530 - ADVANCED CALCULUS 1
        - One 2000-level mathematics course in lieu of an upper level elective
    - Complete one of the following conditions.
        - An honors thesis under the direction of a faculty member in the Department of Mathematics; for students seeking a BPhil from the University Honors College, this requirement could be satisfied by the Honors College thesis
        - A 2000-level mathematics course with a letter grade of B or higher, in addition to the course use for the third item, above.
    - Although not required, the department strongly recommends that honors degree candidates take the intermediate honors courses MATH 1185 and MATH 0450 during their freshman or sophomore year.

Mathematics, BS

Requirements

Calculus courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

Introductory theoretical courses

- MATH 0413 - INTRO THEORETICAL MATHEMATICS
- MATH 0420 - INTRO THEORY 1-VARIABLE CALCULUS
- MATH 0430 - INTRO ABSTRACT ALGEBRAIC SYSTEMS

Upper-level required courses

Required course

- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

One of the following courses

- MATH 1180 - LINEAR ALGEBRA 1
- MATH 1185 - HONORS LINEAR ALGEBRA

One of the following courses

- MATH 1020 - APPLIED ELEMENTARY NUMBER THEORY
- MATH 1025 - INTRODUCTION TO MATHEMATICAL CRYPTOGRAPHY
- MATH 1050 - COMBINATORIAL MATHEMATICS
- MATH 1250 - ABSTRACT ALGEBRA
- MATH 1310 - GRAPH THEORY

Upper-level elective courses

Three of the following courses

- MATH 1020 - APPLIED ELEMENTARY NUMBER THEORY
- MATH 1025 - INTRODUCTION TO MATHEMATICAL CRYPTOGRAPHY
- MATH 1050 - COMBINATORIAL MATHEMATICS
- MATH 1070 - NUMERICAL MATHEMATICAL ANALYSIS
- MATH 1080 - NUMERICAL MATH: LINEAR ALGEBRA
- MATH 1100 - LINEAR PROGRAMMING
- MATH 1110 - INDUSTRIAL MATHEMATICS
- MATH 1250 - ABSTRACT ALGEBRA
- MATH 1280 - ORDINARY DIFFERNTL EQUATIONS 2
- MATH 1290 - TOPICS IN GEOMETRY
- MATH 1310 - GRAPH THEORY
- MATH 1350 - INTRODUCTION TO DIFFERENTIAL GEOMETRY
- MATH 1360 - MODELING IN APPLIED MATH 1
- MATH 1410 - INTRODUCTION FOUNDATIONS OF MATHEMATICS
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1510 - MATHEMATICAL THEORY OF PROBABILITY
- MATH 1530 - ADVANCED CALCULUS 1
- MATH 1540 - ADVANCED CALCULUS 2
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- MATH 1570 - INTRODUCTION TO FOURIER ANALYSIS
- MATH 1700 - INTRODUCTION TO TOPOLOGY
- MATH 2XXX, 3XXX 3-credit graduate level course
- STAT 1631 - INTERMEDIATE PROBABILITY
- STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL

Physics course

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)

Programming course

Choose one

- CS 0007 - INTRODUCTION TO COMPUTER PROGRAMMING
- CS 0008 - INTRODUCTION TO COMPUTER PROGRAMMING WITH PYTHON
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA

Other Requirements and Recommendations

- Majors must complete 40 credits (see below for curriculum details on each major) with a grade of C or higher in each course for the major and at least a 2.00 GPA overall in mathematics courses. The S/NC grade option is not permitted.
- MATH 0413 - INTRO THEORETICAL MATHEMATICS meets the departmental W requirement.
- Credit by examination is usually available only through the placement testing offered for incoming students.
- Students considering graduate work in mathematics should be aware that many programs require a reading knowledge of one or two second languages from among French, German, and Russian.
- To graduate with honors in mathematics or applied mathematics, students must meet the following requirements in addition to the other requirements for the major.
    - Completion of all mathematics requirements
    - Completion of each of the following courses with a grade of B or better:
        - MATH 1250 - ABSTRACT ALGEBRA
        - MATH 1530 - ADVANCED CALCULUS 1
        - MATH 1540 - ADVANCED CALCULUS 2
        - A graduate level mathematics course
    - Completion of an honors thesis under the direction of a member of the mathematics faculty or completion of a second graduate level mathematics course in lieu of the honors thesis
- Students interested in graduate study in mathematics are advised to take MATH 1530 and MATH 1540. Those interested in pursuing secondary education certification in mathematics are required to take MATH 1020, MATH 1230, and MATH 1290. MATH 1230 does not count toward the major.

The statistics requirement is waived for mathematics majors graduating with honors. Although not required, it is recommended that honors candidates take the intermediate honors courses MATH 0450 - INTRODUCTION TO ANALYSIS and MATH 1185 - HONORS LINEAR ALGEBRA during their freshman and sophomore years.

Minor

Mathematics Minor

Prerequisites

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

Lower-level Mathematics courses

Students must complete at least three courses (nine credits) of coursework at or above MATH 0250 - MATRIX THEORY & DIFFT EQUATIONS.

Upper-level Mathematics courses

Students must complete at least two courses (six credits) of MATH courses at the 1000-level.

Additional information and requirements

- Students may not count MATH 0400 - FINITE MATHEMATICS toward the minor.
- Students may not count both MATH 0280 - INTRO TO MATRICES & LINEAR ALG and MATH 1180 - LINEAR ALGEBRA 1 toward the minor.
- Students may not count both MATH 0290 - DIFFERENTIAL EQUATIONS and MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1 toward the minor.
- A letter grade of C or higher is required in each course for completion of this minor.
- Students may not take any course for the minor on the S/NC basis.

Joint Major

Mathematics - Economics, BS

This major was designed for students who may be interested in the quantitative aspects of economic analysis and mathematics. Graduates will be well prepared to pursue a career in business or industry (such as forecasting, analysis, or research). However, many students completing this degree will choose to enter graduate school in economics, business, applied mathematics, or a related field. The curriculum for the joint major consists of nine economics courses, including the core theory courses and some quantitative field courses, seven mathematics courses, and two courses in statistics.

Requirements

Students seeking a mathematics and economics joint major must adhere to the following rules and requirements:

- Completion of at least 58 credits in mathematics and economics courses (see below for detail).
- Earn at least a 2.00 in all courses required for the major. The S/NC option is not permitted.
- Students should check with the departmental advisors in mathematics and economics about the required W course.
- Students planning to do graduate study should keep in mind that many graduate programs require reading knowledge of one or two second languages.

The joint major provides not only a set of requirements but also suggested course sequences of mathematics and economics courses that are compatible with each other and that prepare students for various specialties. The courses follows

Required Courses in Mathematics

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0413 - INTRO THEORETICAL MATHEMATICS
- MATH 0420 - INTRO THEORY 1-VARIABLE CALCULUS
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Linear Algebra

One of the following courses.

- MATH 1180 - LINEAR ALGEBRA 1
- MATH 1185 - HONORS LINEAR ALGEBRA

Statistics courses

Both of the following courses

- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Economics courses

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- ECON 1100 - INTERMEDIATE MICROECONOMICS
- ECON 1110 - INTERMEDIATE MACROECONOMICS
- ECON 1150 - APPLIED ECONOMETRICS 1
- ECON 1200 - GAME THEORY
- One ECON non-0800 series elective course
- Two ECON 1000-level courses that require either ECON 1100 or ECON 1110 as a prerequisite

Additional Math course

Students are encouraged to take at least one field course in mathematics from the following list.

- MATH 1100 - LINEAR PROGRAMMING
- MATH 1110 - INDUSTRIAL MATHEMATICS
- MATH 1280 - ORDINARY DIFFERNTL EQUATIONS 2
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1530 - ADVANCED CALCULUS 1
- MATH 1540 - ADVANCED CALCULUS 2
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1700 - INTRODUCTION TO TOPOLOGY
- STAT 1221 - APPLIED REGRESSION
- STAT 1311 - APPLIED MULTIVARIATE ANALYSIS
- STAT 1321 - APPLIED TIME SERIES
- STAT 1631 - INTERMEDIATE PROBABILITY
- STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL

Note

To qualify for departmental honors in the mathematics and economics joint major, students must meet the following requirements:

- Complete the required economics courses with the added stipulation that ECON 1180 - MATHEMATICAL ECONOMICS and a proseminar be one of the field courses chosen.
- Maintain a GPA of at least 3.00 in mathematics courses, at least 3.25 in economics courses, and at least 3.25 overall.
- Complete the following courses in lieu of those normally taken:
- MATH 0235 - HONORS 1 - VARIABLE CALCULUS
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0450 - INTRODUCTION TO ANALYSIS
- MATH 1185 - HONORS LINEAR ALGEBRA
- MATH 1530 - ADVANCED CALCULUS 1
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Department of Music

The Department of Music makes music through composition, improvisation, and performance and explores music's meaning in the structure of individual works, the relations between them, and their place in the cultures that produce them. One of the most exciting things about music is that it brings together different types of thought and action. The most sensory and practical things and the most theoretical and abstract ones cannot be separated in the musician's world. Thus, music enjoys a special place in the endeavor to understand ourselves. The program for majors is designed to introduce students to all the above ideas and activities, and students throughout the University are invited to join in any of them. In support of this multifaceted program, the department has assembled a diverse faculty, including experts in composition, performance, theory, history, jazz, and ethnomusicology and is committed to the principle of conducting its activities within an atmosphere that encourages communication and cooperation within that diversity. The department also welcomes double majors from all colleges within the University. For more information on the major, the minor, and the Department of Music, see http://www.music.pitt.edu/.

Note: *Students considering declaring a music major or minor should take the Music Theory Placement test, available at the Dietrich School of Arts and Sciences Advising Center. A sufficient score will exempt them from the required MUSIC 0100 - FUNDAMENTALS OF WESTERN MUSIC class. This exam takes about 60 minutes to complete.*

Major

Music, BA

The Department of Music offers an innovative undergraduate program that confers a bachelor's degree and a minor in music. The Department's dynamic faculty offer strong support for undergraduate research and creative expression. Undergraduates also engage with the Department's renowned graduate programs and are encouraged to actively participate in all aspects of the Department's research and performance culture.

Undergraduates choose a course of study from among five tracks: Composition, Global & Popular Music, Jazz, Music & Cultural History, and Performance. The tracks offer students a broad foundation in music scholarship while tailoring specific elements of music study to the student's individual talents and interests.

To declare this major, students must complete MUSIC 0100 - FUNDAMENTALS OF WESTERN MUSIC with a letter grade of B- or better, or achieve a sufficient score to on the Music placement exam to receive credit for this course.

Prerequisite theory course

Students may test out of this prerequisite by completing the Music Theory placement exam with a sufficient score. Students who take this course must earn a letter grade of B- or better to delcare the Music major.

- MUSIC 0100 - FUNDAMENTALS OF WESTERN MUSIC

BA Requirements

Required courses for all tracks

The following courses are required for all tracks in the Music major. Additional requirements specific to each track are listed later in the program description.

- MUSIC 0222 - HISTORY OF WESTERN MUSIC TO 1750
- MUSIC 0411 - THEORY 1
- MUSIC 0412 - MUSICIANSHIP 1
- MUSIC 0416 - MUSICIANSHIP 2
- MUSIC 1310 - GLOBAL AND POPULAR MUSIC
- MUSIC 1903 - SPECIAL TOPICS-DIRECTED RESEARCH
- MUSIC 1904 - SENIOR SEMINAR

Choose one of the following courses

- MUSIC 0711 - HISTORY OF JAZZ
- MUSIC 1326 - AFRICAN-AMERICAN MUSIC IN U.S.

Composition Track

The Composition track is intended for students interested primarily in creating music-of any genre, acoustic or electroacoustic. Students pursuing this track must take MUSIC 0222 - HISTORY OF WESTERN MUSIC TO 1750, indicated in the core course list.

Theory courses

All of the following courses are required for the Composition track.

- MUSIC 0224 - HISTORY OF WEST MUSIC SINCE 1750
- MUSIC 0415 - THEORY 2
- MUSIC 0417 - THEORY 3
- MUSIC 0419 - THEORY 4

Composition courses

Choose two of the following composition courses.

- MUSIC 1421 - COMPOSITION 1
- MUSIC 1422 - COMPOSITION 2
- MUSIC 1431 - INSTRUMENTATION & ORCHESTRATION
- MUSIC 1441 - ELECTRONIC AND COMPUTER MUSIC 1
- MUSIC 1442 - ELECTRONIC AND COMPUTER MUSIC 2
- Any MUSIC course at the 1200- to 1400-level

Jazz Track

The Jazz track provides opportunities for each student to develop their individual interests and strengths in jazz performance, composition, and scholarship.

Choose one of the following courses

Of these two courses, students must take the one that was not taken as a core course.

- MUSIC 0711 - HISTORY OF JAZZ
- MUSIC 1326 - AFRICAN-AMERICAN MUSIC IN U.S.

Required Jazz focused courses

All of the following courses are required for the Jazz track.

- MUSIC 1450 - MUSIC PRODUCTION AND RECORDING
- MUSIC 1741 - JAZZ IMPROVISATION 1
- MUSIC 1742 - JAZZ IMPROVISATION 2
- Six MUSIC performance courses, at 1 credit each, to include at least one term of participation in MUSIC 0640 - JAZZ ENSEMBLE

Choose one of the following courses

- MUSIC 1731 - JAZZ COMPOSITION AND ARRANGING 1
- MUSIC 1732 - JAZZ COMPOSITION AND ARRANGING 2

Global and Popular Music Track

The Global and Popular Music track offers students an interdisciplinary grounding in the study of diverse musical expressions in contemporary and historical perspective.

- MUSIC 0415 - THEORY 2
- ANTH 0780 - INTRODUCTION TO CULTURAL ANTHROPOLOGY
- One upper-level popular music course
- Three upper-level ethno music courses

Music and Cultural History Track

The Music and Cultural History track provides students with a background in the history, culture, and practice of music in the Western imagination.

Music History courses

- MUSIC 0224 - HISTORY OF WEST MUSIC SINCE 1750
- MUSIC 0415 - THEORY 2
- Two MUSIC courses at the 1200-level
- Two MUSIC courses at the 1200- to 1400-level
- Three MUSIC performance courses, at 1 credit each

Choose one of the following courses

- MUSIC 0711 - HISTORY OF JAZZ
- MUSIC 1326 - AFRICAN-AMERICAN MUSIC IN U.S.

Performance Track

The Performance track is intended for students who want to explore and improve their skills as performers in a wide range of genres.

All of the following courses

- MUSIC 0224 - HISTORY OF WEST MUSIC SINCE 1750
- MUSIC 0415 - THEORY 2
- MUSIC 0417 - THEORY 3
- MUSIC 0419 - THEORY 4

Choose one of the following courses

Of these two courses, students must take the one that was not taken as a core course.

- MUSIC 0711 - HISTORY OF JAZZ
- MUSIC 1326 - AFRICAN-AMERICAN MUSIC IN U.S.

One composition course

- MUSIC 1421 - COMPOSITION 1
- MUSIC 1422 - COMPOSITION 2
- MUSIC 1431 - INSTRUMENTATION & ORCHESTRATION
- MUSIC 1441 - ELECTRONIC AND COMPUTER MUSIC 1
- MUSIC 1442 - ELECTRONIC AND COMPUTER MUSIC 2

Six performance courses

Six MUSIC performance courses, at 1 credit each

One of the following composition courses

- MUSIC 1421 - COMPOSITION 1
- MUSIC 1422 - COMPOSITION 2
- MUSIC 1431 - INSTRUMENTATION & ORCHESTRATION
- MUSIC 1441 - ELECTRONIC AND COMPUTER MUSIC 1
- MUSIC 1442 - ELECTRONIC AND COMPUTER MUSIC 2

Other requirements

- Students may test out of MUSIC 0100 MUSIC 0100 - FUNDAMENTALS OF WESTERN MUSIC by passing the Music Theory placement exam, which is administered in the Dietrich School Advising Center, 201 Thackeray Hall.
- A minimum GPA of 2.0 in departmental courses is required for graduation.
- No course that counts toward the major can be taken on an S/NC basis.
- Students must complete at least one W-course in the major.
- All students interested in taking private lessons must complete a Request for Private Lessons form, available in 110 Music Building. Music majors have first priority in scheduling private lessons, which cost an additional $395 per term.
- To graduate with departmental honors, a student must earn a minimum 3.25 GPA overall, a minimum 3.50 GPA in the music courses with no grade lower than a B-.

Minor

Music Minor

The music minor offers a coherent sequence of courses that will provide students with a reasonably broad introduction to the historical, theoretical, and practical branches of music. Required courses, totaling 19 credits, are as follows.

Prerequisite theory course

- MUSIC 0100 - FUNDAMENTALS OF WESTERN MUSIC

Required courses

- MUSIC 0222 - HISTORY OF WESTERN MUSIC TO 1750
  or
- MUSIC 0224 - HISTORY OF WEST MUSIC SINCE 1750
- MUSIC 0411 - THEORY 1
- MUSIC 0412 - MUSICIANSHIP 1
- MUSIC 0416 - MUSICIANSHIP 2
- MUSIC 0711 - HISTORY OF JAZZ
  or
- MUSIC 1326 - AFRICAN-AMERICAN MUSIC IN U.S.
- MUSIC 1310 - GLOBAL AND POPULAR MUSIC
  One course from the 1200- to 1400-level
  Three performance courses, at 1 credit each

Note

Performance includes private lessons and/or ensemble participation. It must include at least one term of participation in a world music ensemble.

Department of Neuroscience

Neuroscience is the study of the biology and function of the central nervous system, with a special focus on the brain. The field has emerged during the past two decades as part of the explosive growth of research and interest in the neural sciences. An autonomous major in neuroscience was developed at the University of Pittsburgh in 1983, and it is among the largest undergraduate programs in neuroscience in the country, with nearly 300 students as majors.

The Bachelor of Science degree in neuroscience prepares students for the following:

- Advanced study in health-related fields, such as medicine, dentistry, pharmacy, public health, physical therapy, physician assistant, and exercise physiology;
- Graduate training in neuroscience and related fields in the biological sciences, and for a future career in a university, research institute, pharmaceutical company, or hospital;
- Research assistant positions in pharmaceutical, hospital, and university settings; and
- Public and private high school teaching following the completion of the teacher certification program in the School of Education.

The neuroscience major is designed to provide a broad and challenging sequence of courses in biological sciences, chemistry, mathematics, and physics, in addition to introductory and advanced courses in neuroscience. Students also may receive credit for original research projects they conduct in collaboration with faculty members. The relatively small size of the upper-level courses, the excellence of teaching, and the opportunity for research have been found to be especially attractive features of the major. A minor in neuroscience is also available. For more information on the major, the minor, and the Department of Neuroscience, see www.neuroscience.pitt.edu.

Major

Neuroscience, BS

Major requirements

Neuroscience majors must complete a minimum of 59 credits, detailed as follows.

Required courses

- NROSCI 1000 - INTRO TO NEUROSCIENCE or
- NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE

- NROSCI 1011 - FUNCTIONAL NEUROANATOMY or
- NROSCI 1013 - FUNCTIONAL NEUROANATOMY (UHC)

- NROSCI 1012 - NEUROPHYSIOLOGY
- NROSCI 1017 - SYNAPTIC TRANSMISSION
- NROSCI 1049 - RESEARCH TOPICS IN NEUROSCIENCE

Writing-intensive course

Choose one of the following writing-intensive courses.

- NROSCI 1800 - NEUROSCIENCE/WRITING PRACTICUM
- NROSCI 1801 - NEUROSCIENCE/WRITING PRACTICUM
- NROSCI 1962 - THESIS RESEARCH/WRITING

Advanced elective courses

Choose two courses from the following list.

- NROSCI 1014 - SPEAKING OF SCIENCE
- NROSCI 1026 - FOUNDATIONS OF CLINICAL NEUROPHYSIOLOGY
- NROSCI 1030 - PSYCHTRC DISORDERS AND BRAIN FUNCTION
- NROSCI 1032 - FUNCTIONAL ORGANIZATION OF THE HUMAN NERVOUS SYSTEM
- NROSCI 1033 - NEURAL BASIS OF VISION
- NROSCI 1034 - NEURAL BASIS OF COGNITION
- NROSCI 1036 - NEUROBIOLOGY OF AGING
- NROSCI 1040 - BIOLOGICAL BASIS OF LEARNING AND MEMORY
- NROSCI 1041 - DEVELOPMENTAL NEUROSCIENCE
- NROSCI 1042 - NEUROCHEMICAL BASIS OF BEHAVIOR
- NROSCI 1043 - NEURAL PLASTICITY
- NROSCI 1140 - BIO BASIS OF LEARNING AND MEMORY-UHC

Capstone course

Choose one of the following courses.

- NROSCI 1027 - NEUROSCIENCE PROSEMINAR
- NROSCI 1901 - INDEPENDENT STUDY

Note

Course descriptions and current syllabi can be found by clicking on the Teaching Faculty link on the right of the Neuroscience Undergraduate home page at www.neuroscience.pitt.edu/programs/undergraduate.

Co-requisite courses

It is recommended that students complete introductory biology, chemistry, and physics courses during freshman and sophomore years. Premed students should also take PHYS 0212 - INTRODUCTION TO LABORATORY PHYSICS or PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING and a statistics course to meet medical school requirements.

Students must complete BIOSC 0150, BIOSC 0160, CHEM 0110, and CHEM 0120 with a letter grade of C or better to declare the major.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 1000 - BIOCHEMISTRY

- BIOSC 1250 - HUMAN PHYSIOLOGY or
- NROSCI 1250 - HUMAN PHYSIOLOGY

- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 0345 - ORGANIC LABORATORY
- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- PHYS 0110 - INTRODUCTION TO PHYSICS 1
- PHYS 0111 - INTRODUCTION TO PHYSICS 2

Required laboratory courses

Choose one course from each of the following two groups.

- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1
- BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1

- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2
- BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2
- BIOSC 0068 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 2

Grade requirements for the major

- Students majoring in neuroscience must take all required courses for a letter grade.
- NROSCI 1000 - INTRO TO NEUROSCIENCE or NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE must be passed with a B- or better. Grades in the remaining core courses and two advanced electives are averaged. All of these courses must be passed, and the average GPA must be 2.00 or better.
- In the co-requisites, a passing grade below C may be accepted only if it is balanced with higher grades, so that the total GPA in co-requisite courses is 2.0 or better. This requirement applies collectively to corequisite courses taught in the Department of Neuroscience (e.g., NROSCI 1070 - HUMAN PHYSIOLOGY-UHC) and those taught in other departments.
- Majors must have a grade of B- in NROSCI 1000 - INTRO TO NEUROSCIENCE or NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE as a prerequisite to taking any other departmental core or advanced elective courses.
- The co-requisite courses in biology and chemistry satisfy the related area requirement for this major.

Department Honors and Undergraduate Research

- To qualify for departmental honors, students need to maintain a minimum overall GPA of 3.25 as well as a GPA of 3.25 in the neuroscience major. In addition, students must complete a substantial amount of experimental neuroscience research on an approved research project and give a public presentation of the work. The full faculty of the department approves departmental honors after consideration of all eligible students.
- The Department of Neuroscience encourages interested undergraduate majors to gain research experience within an active neuroscience laboratory. The department is a world-class research department committed to high quality research and sharing the excitement of scientific exploration with trainees. Majors are encouraged to take advantage of the opportunity to do meaningful neuroscience research while still undergraduates. It is not unusual for majors to report their research at scientific meetings and to be published. While research experience itself has strong benefits, it is also useful for interacting more closely with professors and enhancing preparation for graduate or medical school. Most undergraduates who enroll in research for credit are interested in completing an independent project that results in an undergraduate thesis.

Minor

Neuroscience Minor

Minor Requirements

A minimum of 14 credits is required for a neuroscience minor. The minor includes the following:

- NROSCI 1000 - INTRO TO NEUROSCIENCE or NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE with a grade of C or better
- Three core courses:
  - NROSCI 1011 - FUNCTIONAL NEUROANATOMY
  - NROSCI 1012 - NEUROPHYSIOLOGY
  - NROSCI 1017 - SYNAPTIC TRANSMISSION
- As an alternative to the three core courses, students may take two of the core courses and at least one advanced elective from the following list.
  - NROSCI 1030 - PSYCHTRC DISORDERS AND BRAIN FUNCTION
  - NROSCI 1032 - FUNCTIONAL ORGANIZATION OF THE HUMAN NERVOUS SYSTEM
  - NROSCI 1034 - NEURAL BASIS OF COGNITION
  - NROSCI 1035 - CONTROL OF MOVEMENT
  - NROSCI 1036 - NEUROBIOLOGY OF AGING
  - NROSCI 1040 - BIOLOGICAL BASIS OF LEARNING AND MEMORY
  - NROSCI 1041 - DEVELOPMENTAL NEUROSCIENCE
  - NROSCI 1042 - NEUROCHEMICAL BASIS OF BEHAVIOR

Department of Philosophy

The University of Pittsburgh has one of the best philosophy departments in the country, one with a long tradition of fine teaching. A major in philosophy provides excellent preparation for such professions as law, medicine, and business. The conceptual sophistication imparted by training in philosophy is invaluable in virtually any field of learning or any serious profession. For example, students who are majoring in biology, psychology, history, or computer science would do well to pick up a second major in philosophy, something the Department of Philosophy encourages by offering a standard major track along with its more time-consuming intensive major track. A minor in philosophy is also available. While the department encourages students to major in philosophy, either alone or as a second major, only rarely does it encourage students to pursue philosophy in graduate school as preparation for a scholarly career. Students who do especially well in either the standard or intensive major program are graduated with honors in philosophy. Because of the national reputation of the philosophy department, a major in philosophy or honors in philosophy should materially help University of Pittsburgh graduates get into good graduate schools or professional schools. For more information on the program and the Department of Philosophy, see www.philosophy.pitt.edu.

Major

Philosophy - Intensive Track, BA

Intensive major track

Philosophy courses

Select one course from each of the following three groups. At least one of these three courses must be taken at the 1000-level.

Ancient Philosophy

- PHIL 0200 - HISTORY OF ANCIENT PHILOSOPHY
- PHIL 0202 - HISTORY ANCIENT PHILOSOPHY/WRITING PRACTICUM
- PHIL 1020 - PLATO
- PHIL 1040 - ARISTOTLE
- PHIL 1070 - TOPICS IN ANCIENT PHILOSOPHY

Modern Philosophy

- PHIL 0210 - HISTORY OF MODERN PHILOSOPHY
- PHIL 0212 - HISTORY OF MODERN PHIOSOPHYL/WRITING PRACTICUM
- PHIL 1110 - RATIONALISM
- PHIL 1140 - EMPIRICISM
- PHIL 1170 - KANT

Logic

- PHIL 0500 - INTRODUCTION TO LOGIC
- PHIL 1500 - SYMBOLIC LOGIC

Elective courses

Group 1

Select five 1000-level courses from the following list. Courses taken to fulfill the Philosophy course requirement cannot be counted toward this elective course requirement.

- History of Philosophy: PHIL 1020 PHIL 1020 - PLATO through PHIL 1190 PHIL 1190 - TOPICS IN 19TH CENTURY PHIL
- Value Theory: PHIL 1300 PHIL 1300 - ETHICAL THEORY through PHIL 1390 PHIL 1390 - PHILOSOPHY OF LAW
- Metaphysics and Epistemology: PHIL 1420 PHIL 1420 - PHILOSOPHY OF LANGUAGE through PHIL 1490 PHIL 1490 - TOPICS IN SYSTEMATIC PHILOSOPHY
- Logic and Philosophy of Science: PHIL 1500 PHIL 1500 - SYMBOLIC LOGIC through PHIL 1690 PHIL 1690 - TOPICS IN PHILOSOPHY OF SCIENCE
- Any 1000-level PHIL course except PHIL 1904 or PHIL 1941

Group 2

Select four courses from the following list. Courses taken to fulfill the Philosophy course requirement cannot be counted toward this elective course requirement.

- PHIL 1940 PHIL 1940 - HONORS THESIS/MAJORS
- PHIL 1941 PHIL 1941 - HONORS THESIS 2/MAJORS
- Any PHIL course not taken to fulfill a previous requirement

Other requirements

Other requirements for the intensive Philosophy major:

- **Grade requirements:** Students must earn at least a C in each course that is to count toward the major.
- **Writing (W) requirement:** Students must complete at least one W-course in the major.
- **Satisfactory/No Credit option:** There is no limit to the number of courses that can be taken on an S/NC basis.
- **Honors major requirements:** Students who complete the standard major, intensive major, or joint major will graduate with honors in philosophy if they have earned a grade of A- or better in at least six 1000-level PHIL courses, exclusive of PHIL 1902 and PHIL 1903.
- **Joint majors with philosophy:** Joint majors are not double majors but are multidisciplinary majors offered by two or more departments. The Department of Philosophy offers a joint major in Politics and Philosophy with the Department of Political Science, which is administered by the Department of Political Science. Consult the Department of Political Science for additional information.

Philosophy - Standard Track, BA

Required courses

Select one course from each of the four following groups. At least one of these four courses must be taken at the 1000-level.

Ancient Philosophy

- PHIL 0200 - HISTORY OF ANCIENT PHILOSOPHY
- PHIL 0202 - HISTORY ANCIENT PHILOSOPHY/WRITING PRACTICUM
- PHIL 1020 - PLATO
- PHIL 1040 - ARISTOTLE
- PHIL 1070 - TOPICS IN ANCIENT PHILOSOPHY

Modern Philosophy

- PHIL 0210 - HISTORY OF MODERN PHILOSOPHY
- PHIL 0212 - HISTORY OF MODERN PHIOSOPHYL/WRITING PRACTICUM
- PHIL 1110 - RATIONALISM
- PHIL 1140 - EMPIRICISM
- PHIL 1170 - KANT

Ethics

- PHIL 0300 - INTRODUCTION TO ETHICS
- PHIL 0302 - INTRODUCTION TO ETHICS/WRITING PRACTICUM
- PHIL 0320 - SOCIAL PHILOSOPHY
- PHIL 0322 - SOCIAL PHILOSOPHY/WRITING PRACTICUM
- PHIL 0330 - POLITICAL PHILOSOPHY
- PHIL 0332 - POLITICAL PHILOSOPHY/WRITING PRACTICUM
- PHIL 0380 - WOMEN AND PHILOSOPHY
- Any PHIL course at the 1300-level

Logic

- PHIL 0500 - INTRODUCTION TO LOGIC
- PHIL 1500 - SYMBOLIC LOGIC

Elective courses

Select four 1000-level electives beyond any chosen in the previous groups.

Other requirements

Other requirements for the intensive Philosophy major:

- **Grade requirements:** Students must earn at least a C in each course that is to count toward the major.
- **Writing (W) requirement:** Students must complete at least one W-course in the major.
- **Satisfactory/No Credit option:** There is no limit to the number of courses that can be taken on an S/NC basis.
- **Honors major requirements:** Students who complete the standard major, intensive major, or joint major will graduate with honors in philosophy if they have earned a grade of A- or better in at least six 1000-level PHIL courses, exclusive of PHIL 1902 and PHIL 1903.
- **Joint majors with philosophy:** Joint majors are not double majors but are multidisciplinary majors offered by two or more departments. The Department of Philosophy offers a joint major in Politics and Philosophy with the Department of Political Science, which is administered by the Department of Political Science. Consult the Department of Political Science for additional information.

Minor

Philosophy Minor

Minor Requirements

The philosophy minor requires six 3-credit courses (18 credits total) to be distributed as follows:

- PHIL 0500 - INTRODUCTION TO LOGIC or
- One 1500 level course (Logic group)

- PHIL 0200 - HISTORY OF ANCIENT PHILOSOPHY or
- PHIL 1020 - PLATO

- PHIL 0210 - HISTORY OF MODERN PHILOSOPHY or
- PHIL 1110 - RATIONALISM or
- PHIL 1140 - EMPIRICISM

- Any course in the 1300s Value Theory, Social and Political Philosophy
- Two additional 1000-level courses must be completed.

Any course in moral, social, or political philosophy

PHIL 0300 - INTRODUCTION TO ETHICS is preferred, but any of the following is acceptable:

- PHIL 0320 - SOCIAL PHILOSOPHY
- PHIL 0330 - POLITICAL PHILOSOPHY
- PHIL 0350 - PHILOSOPHY AND PUBLIC ISSUES
- PHIL 0360 - INTRODUCTION TO BIOMEDICAL ETHICS

Note:

At least one of the above four courses (numbers one-four) must be taken at the 1000 level.

Department of Physics and Astronomy

The Department of Physics and Astronomy offers three major degree options: a BS in physics, a BS in physics and astronomy, and a BA in astronomy. The BS degrees are intended for students who wish to prepare for graduate school in a scientific or technical discipline or who are interested in professional careers in which a background in physics or astronomy is appropriate. The BA degree are designed primarily for students who wish to develop a general scientific background appropriate for many careers including health-related professions or MBA programs. The Certificate in Photonics may be added by students in the bachelor of science physics program.

Students planning to pursue a degree within the department are urged to consult a departmental advisor at any time during the freshman year and should obtain a copy of the department's brochure for undergraduates in 100 Allen Hall.

*The department offers the physics minor, best suited for students from other schools. The department wishes to emphasize that its 0080s courses, in both physics and astronomy, use little mathematics and are especially designed for liberal arts students.

Major

Astronomy - Science Breadth Concentration, BA

Astronomy Major Requirements

The BA in Astronomy requires 39 credits of course work as follows.

Specifications

- **Grade requirements:** A minimum GPA of 2.0 in departmental courses is required for graduation.
- **Satisfactory/No Credit option:** No PHYS or ASTRON courses beyond the introductory level may be taken on an S/NC basis.
- **Writing requirement:** Students must complete at least one W-course in the major.

Introductory Physics courses

Select one group

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Introductory Astronomy course

- ASTRON 0113 - INTRODUCTION TO ASTROPHYSICS

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1331 - MECHANICS

Laboratory courses

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Intermediate and advanced Astronomy courses

Choose at least six credits

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- ASTRON 1122 - THE SOLAR SYSTEM AND EXTRASOLAR PLANETS *

Note:

* GEOL 1701 - GEOLOGY OF THE PLANETS may be substituted

Science electives

Choose at least six credits *

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

- CHEM 0320 - ORGANIC CHEMISTRY 2 or
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1701 - GEOLOGY OF THE PLANETS **

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Note:

* Some of these courses have prerequisites

** If this course is taken as a science elective, it cannot be used to satisfy the requirement for nine credits of intermediate and advanced courses.

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Course in the history and philosophy of science or science policy/management

Choose at least three credits

- BUSERV 1915 - INTRODUCTION TO MANAGEMENT
- PHYS 0087 - PHYSICS AND SOCIETY
- PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS
- Any course in the Department of History and Philosophy of Science (HPS)

Writing or communication courses

Choose at least three credits

- COMMRC 0320 - MASS COMMUNICATION PROCESS

- COMMRC 0520 - PUBLIC SPEAKING
- COMMRC 1105 - TELEVISION AND SOCIETY
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1400 - GRANT WRITING
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1394 - SCIENCE WRITING
- LING 1000 - INTRODUCTION TO LINGUISTICS

Science Breadth concentration

This concentration provides broader exposure to other sciences in comparison to the standard Astronomy BA, while going into greater depth in physics and astronomy than a more generic natural science major. With proper selection of courses, this concentration provides the necessary requirements to apply for admission to medical school while roughly matching the credit requirements of the Astronomy BA.

Reduced physics requirements

- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2 *

Note:

* PHYS 0481 is required for the Physics minor

Reduced writing requirements

The three credit writing or communication requirement is waived for students pursuing this concentration.

Added science requirements

Choose two of the three groups, totaling at least 16 credits

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- GEOL 0890 - OCEANOGRAPHY

One of the following course groups

- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2
- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2 or
- BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

Added science electives

Choose one of the three tracks totaling at least six credits

Track 1

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

- CHEM 0320 - ORGANIC CHEMISTRY 2 or
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CHEM 0345 - ORGANIC LABORATORY

Track 2

- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES

Track 3

- Two advanced courses in Biological Sciences (BIOSC), Bioengineering (BIOE), Chemistry (CHEM), Computer Science (CS), or Geology (GEOL).

Astronomy - Science Communication Concentration, BA

Astronomy Major Requirements

The BA in Astronomy requires 39 credits of course work as follows.

Specifications

- **Grade requirements:** A minimum GPA of 2.0 in departmental courses is required for graduation.
- **Satisfactory/No Credit option:** No PHYS or ASTRON courses beyond the introductory level may be taken on an S/NC basis.
- **Writing requirement:** Students must complete at least one W-course in the major.

Introductory Physics courses

Select one group

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Introductory Astronomy course

- ASTRON 0113 - INTRODUCTION TO ASTROPHYSICS

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1331 - MECHANICS

Laboratory courses

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Intermediate and advanced Astronomy courses

Choose at least six credits

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- ASTRON 1122 - THE SOLAR SYSTEM AND EXTRASOLAR PLANETS *

Note:

* GEOL 1701 - GEOLOGY OF THE PLANETS may be substituted

Science electives

Choose at least six credits *

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

- CHEM 0320 - ORGANIC CHEMISTRY 2 or
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1701 - GEOLOGY OF THE PLANETS **

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM

- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Note:

* Some of these courses have prerequisites

** If this course is taken as a science elective, it cannot be used to satisfy the requirement for nine credits of intermediate and advanced courses.

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Course in the history and philosophy of science or science policy/management

Choose at least three credits

- BUSERV 1915 - INTRODUCTION TO MANAGEMENT
- PHYS 0087 - PHYSICS AND SOCIETY
- PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS
- Any course in the Department of History and Philosophy of Science (HPS)

Writing or communication courses

Choose at least three credits

- COMMRC 0320 - MASS COMMUNICATION PROCESS
- COMMRC 0520 - PUBLIC SPEAKING
- COMMRC 1105 - TELEVISION AND SOCIETY
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1400 - GRANT WRITING
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1394 - SCIENCE WRITING
- LING 1000 - INTRODUCTION TO LINGUISTICS

Science Communication concentration

This concentration replaces the three credit writing or communication course with a three credit writing course and 12 credits of communication courses. Students pursuing this concentration may replace the six credits of science electives with the communication course requirements.

Required writing course

- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION

Communication courses

Choose at least 12 credits

- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1400 - GRANT WRITING
- COMMRC 0320 - MASS COMMUNICATION PROCESS
- COMMRC 0520 - PUBLIC SPEAKING
- COMMRC 1105 - TELEVISION AND SOCIETY
- ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1394 - SCIENCE WRITING
- LING 1000 - INTRODUCTION TO LINGUISTICS

Astronomy, BA

Astronomy Major Requirements

The BA in Astronomy requires 39 credits of course work as follows.

Specifications

- **Grade requirements:** A minimum GPA of 2.0 in departmental courses is required for graduation.
- **Satisfactory/No Credit option:** No PHYS or ASTRON courses beyond the introductory level may be taken on an S/NC basis.
- **Writing requirement:** Students must complete at least one W-course in the major.

Introductory Physics courses

Select one group

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Introductory Astronomy course

- ASTRON 0113 - INTRODUCTION TO ASTROPHYSICS

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1331 - MECHANICS

Laboratory courses

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Intermediate and advanced Astronomy courses

Choose at least six credits

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- ASTRON 1122 - THE SOLAR SYSTEM AND EXTRASOLAR PLANETS *

Note:

* GEOL 1701 - GEOLOGY OF THE PLANETS may be substituted

Science electives

Choose at least six credits *

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

- CHEM 0320 - ORGANIC CHEMISTRY 2 or
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1701 - GEOLOGY OF THE PLANETS **

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Note:

* Some of these courses have prerequisites

** If this course is taken as a science elective, it cannot be used to satisfy the requirement for nine credits of intermediate and advanced courses.

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Course in the history and philosophy of science or science policy/management

Choose at least three credits

- BUSERV 1915 - INTRODUCTION TO MANAGEMENT
- PHYS 0087 - PHYSICS AND SOCIETY
- PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS
- Any course in the Department of History and Philosophy of Science (HPS)

Writing or communication courses

Choose at least three credits

- COMMRC 0320 - MASS COMMUNICATION PROCESS
- COMMRC 0520 - PUBLIC SPEAKING
- COMMRC 1105 - TELEVISION AND SOCIETY
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1400 - GRANT WRITING
- ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW
- ENGWRT 1394 - SCIENCE WRITING
- LING 1000 - INTRODUCTION TO LINGUISTICS

Physics - Education Concentration, BS

Physics Major Requirements

- A minimum GPA of 2.0 in departmental courses is required for graduation. Honors majors must attain a minimum GPA of 3.2 in physics courses, a cumulative GPA of 3.09 or higher, completes PHYS 1903 Directed Research, submits a paper detailing the research within the department and presents the research in a public forum (i.e. at the University's Science Symposium or the Undergraduate Poster Fair hosted by UHC).
- No PHYS courses beyond the introductory level may be taken on an S/NC basis.
- Students must complete at least one W-course in the major; students should consult with their department advisor about this requirement.

Physics major, BS

The physics major requires the completion of 47 credits in physics distributed as follows.

Note:

While not required, the introductory level honors courses, PHYS 0475, PHYS 0476, and PHYS 0520 are appropriate particularly for students seeking degrees in physics.

Introductory Physics courses:

(select one group)

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1331 - MECHANICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Laboratory courses

Choose at least 10 credits

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS
- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1426 - MODERN PHYSICS LABORATORY
- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Science electives

Choose at least nine credits from groups A and B. At least three credits must come from a course in group B.

Group A

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

- CHEM 0320 - ORGANIC CHEMISTRY 2 or
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- ENGR 0240 - NANOTECHNOLOGY AND NANO-ENGINEERING
- STAT 1151 - INTRODUCTION TO PROBABILITY

- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Group B

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CHEM 1620 - ATOMS, MOLECULES AND MATERIALS
- ECE 1232 - INTRO LASERS & OPTCL ELECTNC
- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- GEOL 1410 - EXPLORATION GEOPHYSICS
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1374 - SOLID STATE PHYSICS
- PHYS 1375 - FOUNDATIONS OF NANOSCIENCE
- PHYS 1376 - INTRODUCTION TO BIOLOGICAL PHYSICS
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Departmental honors requirements

Honors in physics is granted if in addition to fulfilling all requirements for the major, the student maintains a GPA of 3.2 or higher in courses required for the major, maintains a cumulative GPA of 3.0 or higher, completes MATH 1903 Directed Research, submits a paper detailing the research within the department, and presents the research in a public forum (i.e. at the University's Science Symposium, or the Undergraduate Poster Fair hosted by UHC).

Education concentration

This concentration removes up to 10 credits of physic courses from the standard Physics major requirements. This concentration requires seven credits of lab courses instead of the standard 10 credits.

Additional education related courses

(6 credits)

- PSYED 1001 - INTRO EDUCATIONAL PSYCHOLOGY
- IL 1580 - FOUNDATIONS OF SPECIAL EDUC

Additional courses

Emphasizing the broader impact of science; choose at least three credits.

- PHYS 0087 - PHYSICS AND SOCIETY
- Any course offered by the Department of History and Philosophy of Science

Required courses from the Science electives

Group A

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

Group B

- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2

Physics courses removed

- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Physics - Graduate School Preparation Concentration, BS

Physics Major Requirements

- A minimum GPA of 2.0 in departmental courses is required for graduation. Honors majors must attain a minimum GPA of 3.2 in physics courses, a cumulative GPA of 3.09 or higher, completes PHYS 1903 Directed Research, submits a paper detailing the research within the department and presents the research in a public forum (i.e. at the University's Science Symposium or the Undergraduate Poster Fair hosted by UHC).
- No PHYS courses beyond the introductory level may be taken on an S/NC basis.
- Students must complete at least one W-course in the major; students should consult with their department advisor about this requirement.

Physics major, BS

The physics major requires the completion of 47 credits in physics distributed as follows.

Note:

While not required, the introductory level honors courses, PHYS 0475, PHYS 0476, and PHYS 0520 are appropriate particularly for students seeking degrees in physics.

Introductory Physics courses:

(select one group)

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1331 - MECHANICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Laboratory courses

Choose at least 10 credits

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS
- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1426 - MODERN PHYSICS LABORATORY
- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Science electives

Choose at least nine credits from groups A and B. At least three credits must come from a course in group B.

Group A

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

- CHEM 0320 - ORGANIC CHEMISTRY 2 or
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- ENGR 0240 - NANOTECHNOLOGY AND NANO-ENGINEERING
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Group B

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- CHEM 1410 - PHYSICAL CHEMISTRY 1

- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CHEM 1620 - ATOMS, MOLECULES AND MATERIALS
- ECE 1232 - INTRO LASERS & OPTCL ELECTNC
- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- GEOL 1410 - EXPLORATION GEOPHYSICS
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1374 - SOLID STATE PHYSICS
- PHYS 1375 - FOUNDATIONS OF NANOSCIENCE
- PHYS 1376 - INTRODUCTION TO BIOLOGICAL PHYSICS
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Departmental honors requirements

Honors in physics is granted if in addition to fulfilling all requirements for the major, the student maintains a GPA of 3.2 or higher in courses required for the major, maintains a cumulative GPA of 3.0 or higher, completes MATH 1903 Directed Research, submits a paper detailing the research within the department, and presents the research in a public forum (i.e. at the University's Science Symposium, or the Undergraduate Poster Fair hosted by UHC).

Graduate School Preparation concentration

This concentration adds at least six credits of Physics courses to the standard Physics major requirements. This concentration requires seven credits of lab courses instead of the standard 10 credits.

Additional intermediate and advanced Physics courses

- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2
- PHYS 1372 - ELECTROMAGNETIC THEORY
- PHYS 1373 - MATHEMATICAL METHODS IN PHYSICS

Physics and Astronomy - Education Concentration, BS

Physics and Astronomy Major Requirements

The BS in physics and astronomy requires the completion of 50 credits in physics and astronomy distributed as follows.

Introductory Physics courses:

(select one group)

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Introductory Astronomy course

- ASTRON 0113 - INTRODUCTION TO ASTROPHYSICS

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1331 - MECHANICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Laboratory courses

Choose at least seven credits

Required courses

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Additional courses

- PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS
- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1426 - MODERN PHYSICS LABORATORY

Intermediate and advanced Astronomy courses

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- ASTRON 1122 - THE SOLAR SYSTEM AND EXTRASOLAR PLANETS *

Note:

* GEOL 1701 - GEOLOGY OF THE PLANETS may be substituted for this course.

Science elective

Choose at least three credits *

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1701 - GEOLOGY OF THE PLANETS **
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2
- PHYS 1372 - ELECTROMAGNETIC THEORY
- PHYS 1373 - MATHEMATICAL METHODS IN PHYSICS
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Note:

* Some of these courses have prerequisites

** If this course is taken as a science elective, it cannot be used to satisfy the requirement for the nine credits of intermediate and advanced courses.

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Honors major requirements

Honors in physics and astronomy is granted if in addition to fulfilling all requirements for the major, the student meets the following requirements.

- Maintains a GPA of 3.2 or higher in the major
- Maintains a cumulative GPA of 3.0 or higher
- Completes ASTRON 1903 - DIRECTED RESEARCH or PHYS 1903 - DIRECTED RESEARCH
- Submits a paper detailing the research within the department and presents the research in a public forum (i.e. at the University's Science Symposium or the Undergraduate Poster Fair hosted by the University Honors College).

Education concentration

This concentration removed nine credits from the standard Physics and Astronomy major requirements if one of the courses listed below is taken as a science elective.

Additional education related courses

- PSYED 1001 - INTRO EDUCATIONAL PSYCHOLOGY

- IL 1580 - FOUNDATIONS OF SPECIAL EDUC

Physics courses removed

- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Required laboratory courses

Choose at least eight credits

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- PHYS 1361 - WAVE MOTION AND OPTICS
- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Required selection of science electives

- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2

Physics and Astronomy - Graduate School Preparation Concentration, BS

Physics and Astronomy Major Requirements

The BS in physics and astronomy requires the completion of 50 credits in physics and astronomy distributed as follows.

Introductory Physics courses:

(select one group)

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Introductory Astronomy course

- ASTRON 0113 - INTRODUCTION TO ASTROPHYSICS

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1331 - MECHANICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Laboratory courses

Choose at least seven credits

Required courses

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Additional courses

- PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS
- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1426 - MODERN PHYSICS LABORATORY

Intermediate and advanced Astronomy courses

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- ASTRON 1122 - THE SOLAR SYSTEM AND EXTRASOLAR PLANETS *

Note:

* GEOL 1701 - GEOLOGY OF THE PLANETS may be substituted for this course.

Science elective

Choose at least three credits *

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1701 - GEOLOGY OF THE PLANETS **
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2
- PHYS 1372 - ELECTROMAGNETIC THEORY
- PHYS 1373 - MATHEMATICAL METHODS IN PHYSICS
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Note:

* Some of these courses have prerequisites

** If this course is taken as a science elective, it cannot be used to satisfy the requirement for the nine credits of intermediate and advanced courses.

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Honors major requirements

Honors in physics and astronomy is granted if in addition to fulfilling all requirements for the major, the student meets the following requirements.

- Maintains a GPA of 3.2 or higher in the major
- Maintains a cumulative GPA of 3.0 or higher
- Completes ASTRON 1903 - DIRECTED RESEARCH or PHYS 1903 - DIRECTED RESEARCH
- Submits a paper detailing the research within the department and presents the research in a public forum (i.e. at the University's Science Symposium or the Undergraduate Poster Fair hosted by the University Honors College).

Graduate School Preparation concentration

This concentration adds six credits to the standard Physics and Astronomy major requirements if one of the courses listed below is taken as a science elective.

Additional intermediate and advanced Physics courses

- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2
- PHYS 1372 - ELECTROMAGNETIC THEORY
- PHYS 1373 - MATHEMATICAL METHODS IN PHYSICS

Physics and Astronomy, BS

Physics and Astronomy Major Requirements

The BS in physics and astronomy requires the completion of 50 credits in physics and astronomy distributed as follows.

Introductory Physics courses:

(select one group)

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Introductory Astronomy course

- ASTRON 0113 - INTRODUCTION TO ASTROPHYSICS

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1331 - MECHANICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Laboratory courses

Choose at least seven credits

Required courses

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Additional courses

- PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS
- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1426 - MODERN PHYSICS LABORATORY

Intermediate and advanced Astronomy courses

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- ASTRON 1122 - THE SOLAR SYSTEM AND EXTRASOLAR PLANETS *

Note:

* GEOL 1701 - GEOLOGY OF THE PLANETS may be substituted for this course.

Science elective

Choose at least three credits *

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES

- GEOL 1410 - EXPLORATION GEOPHYSICS
- GEOL 1701 - GEOLOGY OF THE PLANETS **
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2
- PHYS 1372 - ELECTROMAGNETIC THEORY
- PHYS 1373 - MATHEMATICAL METHODS IN PHYSICS
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Note:

* Some of these courses have prerequisites

** If this course is taken as a science elective, it cannot be used to satisfy the requirement for the nine credits of intermediate and advanced courses.

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Honors major requirements

Honors in physics and astronomy is granted if in addition to fulfilling all requirements for the major, the student meets the following requirements.

- Maintains a GPA of 3.2 or higher in the major
- Maintains a cumulative GPA of 3.0 or higher
- Completes ASTRON 1903 - DIRECTED RESEARCH or PHYS 1903 - DIRECTED RESEARCH
- Submits a paper detailing the research within the department and presents the research in a public forum (i.e. at the University's Science Symposium or the Undergraduate Poster Fair hosted by the University Honors College).

Physics, BS

Physics Major Requirements

- A minimum GPA of 2.0 in departmental courses is required for graduation. Honors majors must attain a minimum GPA of 3.2 in physics courses, a cumulative GPA of 3.09 or higher, completes PHYS 1903 Directed Research, submits a paper detailing the research within the department and presents the research in a public forum (i.e. at the University's Science Symposium or the Undergraduate Poster Fair hosted by UHC).
- No PHYS courses beyond the introductory level may be taken on an S/NC basis.
- Students must complete at least one W-course in the major; students should consult with their department advisor about this requirement.

Physics major, BS

The physics major requires the completion of 47 credits in physics distributed as follows.

Note:

While not required, the introductory level honors courses, PHYS 0475, PHYS 0476, and PHYS 0520 are appropriate particularly for students seeking degrees in physics.

Introductory Physics courses:

(select one group)

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED) and
- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1 and
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Intermediate and advanced Physics courses

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS
- PHYS 1310 - UNDERGRADUATE SEMINAR
- PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS
- PHYS 1331 - MECHANICS
- PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS
- PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM
- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Laboratory courses

Choose at least 10 credits

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING or
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

- PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS
- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1426 - MODERN PHYSICS LABORATORY
- ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Science electives

Choose at least nine credits from groups A and B. At least three credits must come from a course in group B.

Group A

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

- CHEM 0320 - ORGANIC CHEMISTRY 2 or
- CHEM 0740 - UHC ORGANIC CHEMISTRY 2

- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0445 - DATA STRUCTURES
- ENGR 0240 - NANOTECHNOLOGY AND NANO-ENGINEERING
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Group B

- ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION
- ASTRON 1121 - GALAXIES AND COSMOLOGY
- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CHEM 1620 - ATOMS, MOLECULES AND MATERIALS
- ECE 1232 - INTRO LASERS & OPTCL ELECTNC
- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- GEOL 1410 - EXPLORATION GEOPHYSICS
- MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1
- MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS
- MATH 1560 - COMPLEX VARIABLES & APPLICATIONS
- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1374 - SOLID STATE PHYSICS
- PHYS 1375 - FOUNDATIONS OF NANOSCIENCE
- PHYS 1376 - INTRODUCTION TO BIOLOGICAL PHYSICS
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS

Prerequisite Mathematics courses

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1 or
- MATH 1185 - HONORS LINEAR ALGEBRA

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Departmental honors requirements

Honors in physics is granted if in addition to fulfilling all requirements for the major, the student maintains a GPA of 3.2 or higher in courses required for the major, maintains a cumulative GPA of 3.0 or higher, completes MATH 1903 Directed Research, submits a paper detailing the research within the department, and presents the research in a public forum (i.e. at the University's Science Symposium, or the Undergraduate Poster Fair hosted by UHC).

Minor

Physics Minor

First level Phyiscs course

Select one of the following courses.

- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
- PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1

Second level Phyiscs course

Select one of the following courses.

- PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)
- PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Physics lab course

Select one of the following courses.

- PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING
- PHYS 0520 - MODERN PHYSICS MEASUREMENTS

Principles of Physics course

Select one of the following courses.

- PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS

Additional Physics course

Select one of the following courses.

- PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2
- PHYS 1374 - SOLID STATE PHYSICS
- PHYS 1375 - FOUNDATIONS OF NANOSCIENCE
- PHYS 1376 - INTRODUCTION TO BIOLOGICAL PHYSICS
- PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS

Department of Political Science

A major in political science is designed to help students understand the complexity of political developments in the United States and throughout the world. The major also provides students with a broad education that will help them to prepare for a wide variety of careers in various levels of government service, law, education, journalism, business, and the nonprofit sector. Those interested in government service careers may wish to complement their study of political science with courses in public service offered through the College of General Studies and the Graduate School of Public and International Affairs.

The political science department offers many courses that meet the international/foreign cultures requirements of the core curriculum of the Dietrich School of Arts and Sciences, as well as requirements for the wide range of certificate programs sponsored by the University Center for International Studies (African Studies, Asian Studies, European Union Studies, Global Studies, Latin American Studies, Russian and East European Studies, West European Studies, Global Service Center).

Major

Political Science, BA

Political Science Major Requirements

The major requires the completion of 33 credits.

The political science department offers a large number of courses in four substantive fields: American Politics, Comparative Politics, International Relations, and Political Theory. Core courses provide a survey of each field and with the methods employed in the contemporary study of politics. The field courses, at 1000-level, provide students with advanced coursework in each of these areas of specialization. The combination of core and field courses provides students with a comprehensive overview of political science as a discipline while permitting students to concentrate in a particular field or fields.

Core Courses

Students take all five of the core courses, which provide first and second year students with a survey of each of these fields and with the methods employed in the contemporary study of politics.

- PS 0200 American Political Process: An introduction to the institutions and political processes in the United States. The course surveys the presidency, Congress, and the judicial system as well as political behavior, public opinion, political attitudes, and the party system.
- PS 0300 Comparative Politics: An introduction to political systems outside the United States. The course surveys a variety of theoretical approaches to the comparison of political systems and an examination of the political processes, institutions, and current political developments in a variety of political systems in all of the major regions of the world.
- PS 0500 World Politics: An introduction to the study of foreign policy, covering the international political environment in which nation-states and other actors operate, as well as the specific policies adopted by particular states.
- PS 0600 Political Theory and Analysis: An introduction to the history of Western political ideas, including the thought of Plato, Aristotle, Machiavelli, Locke, Mill, and Marx.
- PS 0700 Research Methods in Political Science: An introduction to the methods used in political science research, covering the logic of social scientific inquiry, the basics of research design, and the quantitative and qualitative methods that are commonly used by political scientists to investigate important questions about the political world.

Field Courses

At the 1000 level, students must take a total of six courses (18 credits), distributed across a major field (three courses), a minor field (two courses) and one course in an elective field. In the major field, one of the courses must be a capstone seminar.

In each of the four substantive undergraduate fields of political science, a wide variety of advanced (1000-level) courses is offered on a regular basis. Some courses are offered annually, while others are offered less frequently. For details on course offerings and content, see the Undergraduate Course Descriptions.

American Politics

- PS 1201 - CONSTITUTION AND CIVIL LIBERTIES
- PS 1202 - AMERICAN CONSTITUTIONAL LAW
- PS 1203 - JUDICIAL POLITICS
- PS 1204 - WOMEN IN POLITICS
- PS 1211 - LEGISLATIVE PROCESS
- PS 1212 - AMERICAN PRESIDENCY
- PS 1213 - LAW AND POLITICS
- PS 1230 - INTEREST GROUP POLITICS
- PS 1231 - POLITICAL PARTIES AND ELECTIONS
- PS 1233 - POLITICAL PSYCHOLOGY
- PS 1234 - ELECTORAL BEHAVIORS AND DEMOCRATIC PROCESS
- PS 1235 - MEDIA AND POLITICS
- PS 1240 - THE POLITICS OF DIVERSITY
- PS 1250 - GAMES, POLITICS, AND STRATEGY
- PS 1252 - STATE GOVERNMENT
- PS 1261 - AMERICAN PUBLIC POLICY
- PS 1275 - RELIGION AND AMERICAN POLITICS
- PS 1281 - CAPSTONE SEMINAR IN AMERICAN POLITICS

Comparative Politics

- PS 1302 - POLITICAL DEVELOPMENT
- PS 1311 - WESTERN EUROPEAN GOVERNMENT AND POLITICS
- PS 1317 - POLITICS OF THE EUROPEAN UNION
- PS 1321 - LATIN AMERICAN POLITICS
- PS 1324 - US-LATIN AMERICAN RELATIONS
- PS 1328 - AUTHORITARIAN STATECRAFT AND THE ARTS OF RESISTANCE
- PS 1330 - EUROPEAN UNION SEMINAR
- PS 1332 - GOVERNMENT AND POLITICS IN CONTEMPORARY CHINA
- PS 1333 - GOVERNMENT AND POLITICS OF JAPAN
- PS 1336 - BUSINESS AND POLITICAL ECONOMY IN MODERN CHINA
- PS 1341 - GOVERNMENT AND POLITICS USSR/RUSSIAN FEDERATION
- PS 1348 - XENOPHOBIA IN MODERN EUROPE
- PS 1351 - GOVERNMENT AND POLITICS OF THE MIDDLE EAST
- PS 1352 - INTRODUCTION TO AFRICAN POLITICS
- PS 1357 - THE POLITICS OF FOOD, LAND, AND SUSTAINABILITY
- PS 1361 - COMPARATIVE POLITICAL PARTY SYSTEMS
- PS 1381 - CAPSTONE SEMINAR IN COMPARATIVE POLITICS

International Relations

- PS 1501 - THEORY OF INTERNATIONAL RELATIONS
- PS 1503 - INTERNATIONAL ORGANIZATION
- PS 1504 - NATIONALISM
- PS 1509 - CONFLICT AND WAR THEORY
- PS 1510 - COLDWAR:SOVIET UNION AND WEST 1917-91
- PS 1511 - AMERICAN FOREIGN POLICY
- PS 1536 - HUMAN SECURITY
- PS 1537 - PEACEMAKING & PEACEKEEPING
- PS 1538 - THE POLITICS OF OIL AND NATURAL RESOURCES
- PS 1542 - GLOBAL ENVIRONMENTAL POLITICS
- PS 1543 - GLOBALIZATION AND INTERNATIONAL POLITICS
- PS 1581 - CAPSTONE SEMINAR IN INTERNATIONAL RELATIONS

Political Theory and Analysis

- PS 1601 - ANCIENT AND MEDIEVAL POLITICAL THOUGHT
- PS 1602 - EARLY MODERN AND ENLIGHTENMENT POLITICAL THOUGHT
- PS 1603 - MODERN AND CONTEMPORARY POLITICAL THOUGHT
- PS 1607 - AMERICAN POLITICAL THOUGHT
- PS 1612 - MARXISM
- PS 1614 - THEORIES OF JUSTICE
- PS 1619 - DEMOCRATIC THEORY
- PS 1622 - FEMINIST POLITICAL THOUGHT
- PS 1675 - POLITICS OF HUMAN RIGHTS
- PS 1681 - CAPSTONE SEMINAR IN POLITICAL THEORY

Additional Offerings

- PS 1702 - CODING AND COMPUTATION SOCIAL SCIENCE
- PS 1900 - INTERNSHIP
- PS 1901 - INDEPENDENT STUDY
- PS 1902 - DIRECTED READING
- PS 1903 - DIRECTED RESEARCH

- PS 1910 - INSTITUTE OF POLITICS INTERNSHIP/SEMINAR

Capstone seminar

The University of Pittsburgh requires students to complete one writing-intensive course in their major. The Capstone Seminar, which is taken in the major field, fulfills the university-wide requirement of an intensive writing course (W-course) in the major and allows students to undertake advanced work under the direction of faculty in a smaller seminar setting.

Departmental honors requirements

Departmental honors are conferred upon students who maintain an overall GPA of 3.5 and achieve a GPA of 3.7 or better in political science.

Grade requirements

A minimum GPA of 2.0 in departmental courses is required for graduation. In addition, a student must earn a grade of at least C- for a course to satisfy a PS requirement.

Satisfactory/No Credit option

No course to be counted toward the major can be taken on an S/NC basis.

Political Science, BPHIL

Political Science Major Requirements

The major requires the completion of 33 credits.

The political science department offers a large number of courses in four substantive fields: American Politics, Comparative Politics, International Relations, and Political Theory. Core courses provide a survey of each field and with the methods employed in the contemporary study of politics. The field courses, at 1000-level, provide students with advanced coursework in each of these areas of specialization. The combination of core and field courses provides students with a comprehensive overview of political science as a discipline while permitting students to concentrate in a particular field or fields.

Political Science BS and BPhil

Outstanding and motivated students seeking an even more challenging academic experience, especially those who are considering graduate school, should consult with an advisor about the option of a BS or BPhil in Political Science. The BS degree requires the departmental minor field to be Methods and Models in Political Science (PS 1702 and PS 1710), as well as 12 credits of additional coursework in cognate fields and an original paper of high quality. The BPhil degree, which is offered through the University Honors College (UHC), requires a plan of cognate fieldwork and a thesis approved by the department and UHC. For more information on the BPhil, see www.honorscollege.pitt.edu/bphil-degree.

Second Language

None required beyond the requirements of Arts and Sciences. Study of a second language is highly recommended for students with an interest in politics outside of the United States and for all those considering graduate work in comparative politics or a career in government agencies concerned with international affairs.

Statistics

Not required for majors, but highly recommended for all those interested in graduate education in political science, business, or public policy.

Independent Study

Students who have completed the field course may explore a particular subject in greater depth in a tutorial with the appropriate faculty member. Permission of the instructor is required.

Political Science, BS

Political Science Major Requirements

The major requires the completion of 33 credits.

The political science department offers a large number of courses in four substantive fields: American Politics, Comparative Politics, International Relations, and Political Theory. Core courses provide a survey of each field and with the methods employed in the contemporary study of politics. The field courses, at 1000-level, provide students with advanced coursework in each of these areas of specialization. The combination of core and field courses provides students with a comprehensive overview of political science as a discipline while permitting students to concentrate in a particular field or fields.

Political Science BS and BPhil

Outstanding and motivated students seeking an even more challenging academic experience, especially those who are considering graduate school, should consult with an advisor about the option of a BS or BPhil in Political Science. The BS degree requires the departmental minor field to be Methods and Models in Political Science (PS 1702 and PS 1710), as well as 12 credits of additional coursework in cognate fields and an original paper of high quality. The BPhil degree, which is offered through the University Honors College (UHC), requires a plan of cognate fieldwork and a thesis approved by the department and UHC. For more information on the BPhil, see www.honorscollege.pitt.edu/bphil-degree.

Second Language

None required beyond the requirements of Arts and Sciences. Study of a second language is highly recommended for students with an interest in politics outside of the United States and for all those considering graduate work in comparative politics or a career in government agencies concerned with international affairs.

Statistics

Not required for majors, but highly recommended for all those interested in graduate education in political science, business, or public policy.

Independent Study

Students who have completed the field course may explore a particular subject in greater depth in a tutorial with the appropriate faculty member. Permission of the instructor is required.

Minor

Political Science, Minor

A minor in political science is composed of one core course and four field courses in one of the four fields of political science.

Internships

A wide range of internships related to the study of politics at the local, national, and international levels are available in both the public and private sectors in Pittsburgh, Washington D.C., and other major cities. Students must work closely with a faculty advisor to assure full academic credit.

Study Abroad

Majors in political science receive full academic credit for participation in all study abroad programs. The University of Pittsburgh is a participant in a wide range of programs of international study.

Honors Society

Students who have achieved a GPA of 3.0 in political science are encouraged to join Pi Sigma Alpha, the national honors society in political science. This society sponsors many extracurricular activities linked to the study of politics.

Advising

Questions about courses, departmental requirements, and extracurricular opportunities should be addressed to the undergraduate advisors.

Department of Psychology

The psychology major is part of the liberal arts program in the Dietrich School. As such, it provides students with the skills needed to succeed in a job and in graduate school, to think critically and communicate effectively about human behavior and related topics. The Department of Psychology also functions from the perspective that psychology is a natural science. The emphasis it places on research is evident in the foundation courses required to declare the psychology major (e.g., statistics, research methods), as well as in the focus on the scientific methods throughout the content of all other psychology courses. To complement their arts and sciences training, the department also encourages students to participate in directed research and/or supervised field placement opportunities. For more information on the psychology department and its programs, please visit www.psychology.pitt.edu

Psychology majors can participate in one of two major options:

Major

Psychology, BS

The psychology major is part of the liberal arts program in the Dietrich School. As such, it provides students with the skills needed to succeed in a job and in graduate school, to think critically and communicate effectively about human behavior and related topics. The Department of Psychology also functions from the perspective that psychology is a natural science. The emphasis it places on research is evident in the foundation courses required to declare the psychology major (e.g., statistics, research methods), as well as in the focus on the scientific methods throughout the content of all other psychology courses. To complement their arts and sciences training, the department also encourages students to participate in directed research and/or supervised field placement opportunities. For more information on the psychology department and its programs, please visit the Department of Psychology Web site.

Psychology majors an participate in one of two major options: General major in Psychology, and Honors in Psychology. Students who declare the Psychology major are automatically enrolled in the general major track. This track provides students with a broad background in psychology and a firm understanding of the scientific method. The majority of students remain in this track.

In addition to Dietrich School skills and General Education Requirements, psychology majors must complete 33 to 34 credits in psychology, four credits in statistics, and nine to10 credits of co-requirements as described below. The honors track offers students a challenging and unique opportunity: to conduct their own, independent research study under the guidance of a faculty member. Additional course and GPA requirements apply. Students interested in pursuing the honors track should speak with an advisor in the Psychology Advising Office.

The following requirements apply to students who declare the Psychology major in spring 2020 term or later. Students who declared the major before spring 2020 should consult with the Psychology Advising Office.

One course in Statistics

The required course in statistics should be taken ae early as possible; the contents of the course is relevant to many required psychology courses. The statistics course must be taken before a student can enroll in PSY 0036 - RESEARCH METHODS LECTURE and PSY 0037 - RESEARCH METHODS LAB.

Choose one of the following courses.

- STAT 0200 - BASIC APPLIED STATISTICS
- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

Foundation courses

Three courses are required to declare the major; students must earn a C or better in all three foundation courses if they wish to graduate with a psychology major.

- PSY 0010 - INTRODUCTION TO PSYCHOLOGY
- PSY 0036 - RESEARCH METHODS LECTURE
- PSY 0037 - RESEARCH METHODS LAB

Core courses

Choose four courses from the following list.

- PSY 0105 - INTRODUCTION TO SOCIAL PSYCHOLOGY
- PSY 0205 - PSYCHOPATHOLOGY
- PSY 0310 - DEVELOPMENTAL PSYCHOLOGY
- PSY 0422 - COGNITIVE PSYCHOLOGY
- PSY 0505 - INTRODUCTION TO BIOPSYCHOLOGY or
- NROSCI 1000 - INTRO TO NEUROSCIENCE

Upper level

Choose two 1000-level courses, not to include the following courses

- PSY 1900 - SUPERVISED FIELD PLACEMENT
- PSY 1902 - DIRECTED INDIVIDUAL READING
- PSY 1903 - DIRECTED INDIVIDUAL RESEARCH S/NC
- PSY 1950 - PSYCHOLOGY SENIOR SEMINAR
- PSY 1970 - UNDERGRADUATE TEACHING ASSISTANT EXPERIENCE
- PSY 1973 - HONORS DIRECTED RESEARCH
- PSY 1975 - HONORS THESIS/MAJORS

Electives

Choose a course from any of the following levels.

- PSY 0100-level
- PSY 0300-level
- PSY 0400-level
- PSY 0500-level
- PSY 1000-level

The elective course cannot include any course used to fulfill a core requirement, any 1000-level requirement, or lab methods requirement. Experiential learning courses - PSY 1900, PSY 1902, and PSY 1903 may be used to fulfill this requirement. PSY 1950, PSY 1970, PSY 1973 , and PSY 1975 may not be used to fulfill this requirement.

Laboratory

Choose one of the following courses.

- PSY 0405 - LEARNING AND MOTIVATION
- PSY 0423 - COGNITIVE PSYCHOLOGY LAB
- PSY 1025 - TESTS AND MEASUREMENT
- PSY 1059 - TOPICS IN ADVANCED RESEARCH METHODS
- PSY 1112 - PSYCHOLOGICAL ASPECTS OF HUMAN SEXUALITY: RESEARCH WRITING PRACTICUM
- PSY 1213 - PSYCHOPATHOLOGY ADVANCED LAB
- PSY 1305 - EXPERIMENTAL CHILD PSYCHOLOGY

- PSY 1471 - MAPPING HUMAN BRAIN CONNECTIVITY TECHNOLOGY BASIC RESEARCH AND CLINICAL APPLICATIONS
- PSY 1975 - HONORS THESIS/MAJORS

Co-requirements

The Department of Psychology requires that students further develop their scientific skills through certain approved courses in math, biological sciences, and social sciences. A list of these approved courses is available in the Psychology Advising Office. The co-requirements may be used to fulfill Dietrich School General Education Requirements, where appropriate, or can be taken as separate courses.

Psychology majors must also follow these rules and requirements:

- Students who wish to delcare a major in psychology must first complete PSY 0010 and the statistics course with a letter grade of C or better. After completing these courses, students must be enrolled in PSY 0036 and PSY 0037.
- New majors must complete an online orientation prior to scheduling an appointment with their assigned psychology advisors. Students will receive an e-mail with instructions and dates approximately the fourth week of each fall and spring term.
- Psychology majors must maintain at least a 2.0 GPA in their departmental courses.
- All psychology and statistics courses used to fulfill requirements for the major must be taken for a letter grade.
- Majors must take one of the writing-intensive courses (W-courses) offered within the department. PSY 0037 is offered every term and is a W-course. Other W-courses offered in the department are PSY 1112 and PSY 1305.

Department of Religious Studies

Religion is one of the creative expressions of the human spirit. As such, it has shaped and, in turn, been shaped by virtually all historical traditions as well as by many other forms of human activity such as the arts, literature, political thinking, and social behavior. Therefore, the academic study of religion should be carried out through diverse scholarly methodologies, and it should treat experiences in a variety of cultural contexts in different periods. Students who wish to understand the manner in which religion, in its broadest terms, has contributed to the shaping of the human experience are encouraged to pursue a course of study that will expand their methodological skills as well as give them a firm command of a particular cultural or historical context. Courses in the study of religion tend to emphasize the human search for meaning and value in history; the manner in which particular religious traditions, practices, thoughts, and orientations have evolved over time; and the degree to which religious views have interacted creatively with other systems of thought and other meaningful expressions of human activity. In addition to courses in the Department of Religious Studies, other departments, such as anthropology, classics, history, philosophy, and sociology, offer related courses. For more information on the Department or Religious Studies and its programs, visit www.religiousstudies.pitt.edu.

Major

Religious Studies, BA

Major Requirements

Students pursuing a major in Religious Studies are required to complete 30 credits, detailed as follows.

Introductory courses

- RELGST 0105 - RELIGIONS OF THE WEST
- RELGST 0505 - RELIGION IN ASIA

Survey course

Select one of the following courses.

- RELGST 0025 - MAJOR BIBLICAL THEMES
- RELGST 0405 - WITCHES TO WALDEN POND
- RELGST 0415 - RELIGION IN MODERN AMERICA
- RELGST 0455 - INTRODUCTION TO ISLAMIC CIVILIZATION
- RELGST 0715 - PHILOSOPHY OF RELIGION
- RELGST 1120 - ORIGINS OF CHRISTIANITY

- RELGST 1130 - VARIETIES OF EARLY CHRISTIANITY
- RELGST 1135 - ORTHODOX CHRISTIANITY
- RELGST 1210 - JEWS AND JUDAISM IN THE ANCIENT WORLD
- RELGST 1220 - JEWS AND JUDAISM IN THE MEDIEVAL WORLD
- RELGST 1250 - JEWS AND JUDAISM IN THE MODERN WORLD
- RELGST 1550 - EAST ASIAN BUDDHISM
- RELGST 1560 - RELIGION AND HEALING IN CHINA
- RELGST 1570 - RELIGION IN JAPAN

Thematic courses

Select three courses in one thematic cluster listed below.

Religion, Medicine, and the Body

- RELGST 1143 - DEATH IN THE NAME OF GOD
- RELGST 1151 - DEATH IN THE MEDITERRANEAN WORLD
- RELGST 1405 - RELIGION AND SEXUALITY
- RELGST 1554 - DEATH AND BEYOND IN BUDDHIST CULTURES
- RELGST 1558 - BUDDHISM AND PSYCHOLOGY
- RELGST 1725 - DEATH AND HEALTHCARE PROFESSIONS

Spirituality and Rationality

- RELGST 0090 - MYTH IN THE ANCIENT NEAR EAST
- RELGST 1100 - ISRAEL IN THE BIBLICAL AGE
- RELGST 1142 - THE CONSTRUCTION OF EVIL IN WESTERN RELIGIOUS TRADITIONS
- RELGST 1145 - GRECO-ROMAN RELIGIONS
- RELGST 1540 - SAINTS EAST AND WEST
- RELGST 1545 - MYSTICISM IN ASIA
- RELGST 1552 - BUDDHIST MEDITATIVE TRADITIONS
- RELGST 1610 - MYTH, SYMBOL AND RITUAL
- RELGST 0760 - RELIGION AND RATIONALITY
- RELGST 1762 - THE GUIDE OF THE PERPLEXED

Religion, Culture, and Creative Expression

- RELGST 0435 - RELIGION, FILM AND LITERATURE
- RELGST 0525 - RELIGION AND CULTURE IN EAST ASIA
- RELGST 1148 - RELIGIONS OF ANCIENT EGYPT
- RELGST 1160 - JERUSALEM: HISTORY AND IMAGINATION
- RELGST 1425 - POPULAR RELIGION IN AMERICA
- RELGST 1452 - HYMNS & HIPHOP: SOUNDS OF ISLAM
- RELGST 1510 - HINDU MYTHOLOGY
- RELGST 1572 - POPULAR RELIGION IN CHANGING JAPAN

Religion, Identity, and Global Problems

- RELGST 1240 - JEWS AND THE CITY
- RELGST 1241 - GENDER AND JEWISH HISTORY
- RELGST 1252 - HOLOCAUST HISTORY AND MEMORY
- RELGST 1372 - CATHOLICISM IN THE NEW WORLD
- RELGST 1438 - RELIGION AND POLITICS
- RELGST 1450 - ISLAM, LAW, AND POLITICS
- RELGST 1518 - RELIGION AND ECOLOGY

- RELGST 1520 - BUDDHISM ALONG THE SILK ROAD
- RELGST 1620 - WOMEN IN RELIGION
- RELGST 1642 - CHRISTIAN-MUSLIM RELATIONS
- RELGST 1644 - CHRISTIAN MUSLIMS JEWS IN THE MIDDLE AGES: CONNECTION & CONFLICT
- RELGST 1680 - HISTORY AND MEMORY IN THE JEWISH TRADITION
- RELGST 1681 - INVENTING ISRAEL: ZIONISM, ANTI-ZIONISM, AND POST-ZIONISM

Elective courses

Students must take three elective course. One of these courses must be a 1000-level RELGST course of their choice. The other two courses may include an internship, an undergraduate teaching assistantship, or a directed study course. Students must complete a minimum of nine credits in elective courses.

Capstone course

The capstone seminar has a prerequisite of any six RELGST courses.

- RELGST 1903 - DIRECTED RESEARCH-UNDERGRADUATE

Distribution courses

Students must take at least one course from each of the following groups. The same course may not fulfill more than one distribution requirement.

Religion in Asia

- RELGST 0525 - RELIGION AND CULTURE IN EAST ASIA
- RELGST 1510 - HINDU MYTHOLOGY
- RELGST 1520 - BUDDHISM ALONG THE SILK ROAD
- RELGST 1540 - SAINTS EAST AND WEST
- RELGST 1545 - MYSTICISM IN ASIA
- RELGST 1550 - EAST ASIAN BUDDHISM
- RELGST 1552 - BUDDHIST MEDITATIVE TRADITIONS
- RELGST 1554 - DEATH AND BEYOND IN BUDDHIST CULTURES
- RELGST 1558 - BUDDHISM AND PSYCHOLOGY
- RELGST 1560 - RELIGION AND HEALING IN CHINA
- RELGST 1570 - RELIGION IN JAPAN
- RELGST 1572 - POPULAR RELIGION IN CHANGING JAPAN

Ancient or Classical Religion in the Middle East and/or Europe

- RELGST 0025 - MAJOR BIBLICAL THEMES
- RELGST 0090 - MYTH IN THE ANCIENT NEAR EAST
- RELGST 1100 - ISRAEL IN THE BIBLICAL AGE
- RELGST 1120 - ORIGINS OF CHRISTIANITY
- RELGST 1130 - VARIETIES OF EARLY CHRISTIANITY
- RELGST 1135 - ORTHODOX CHRISTIANITY
- RELGST 1142 - THE CONSTRUCTION OF EVIL IN WESTERN RELIGIOUS TRADITIONS
- RELGST 1143 - DEATH IN THE NAME OF GOD
- RELGST 1145 - GRECO-ROMAN RELIGIONS
- RELGST 1148 - RELIGIONS OF ANCIENT EGYPT
- RELGST 1151 - DEATH IN THE MEDITERRANEAN WORLD
- RELGST 1160 - JERUSALEM: HISTORY AND IMAGINATION
- RELGST 1210 - JEWS AND JUDAISM IN THE ANCIENT WORLD
- RELGST 1220 - JEWS AND JUDAISM IN THE MEDIEVAL WORLD
- RELGST 1540 - SAINTS EAST AND WEST

- RELGST 1545 - MYSTICISM IN ASIA
- RELGST 1642 - CHRISTIAN-MUSLIM RELATIONS
- RELGST 1644 - CHRISTIAN MUSLIMS JEWS IN THE MIDDLE AGES: CONNECTION & CONFLICT
- RELGST 1645 - THE HISTORICAL JESUS
- RELGST 1680 - HISTORY AND MEMORY IN THE JEWISH TRADITION
- RELGST 1762 - THE GUIDE OF THE PERPLEXED

Modern or Contemporary Religion in the Middle East, Europe, or the Americas

- RELGST 0405 - WITCHES TO WALDEN POND
- RELGST 0415 - RELIGION IN MODERN AMERICA
- RELGST 0435 - RELIGION, FILM AND LITERATURE
- RELGST 0455 - INTRODUCTION TO ISLAMIC CIVILIZATION
- RELGST 0715 - PHILOSOPHY OF RELIGION
- RELGST 1240 - JEWS AND THE CITY
- RELGST 1241 - GENDER AND JEWISH HISTORY
- RELGST 1250 - JEWS AND JUDAISM IN THE MODERN WORLD
- RELGST 1252 - HOLOCAUST HISTORY AND MEMORY
- RELGST 1256 - MODERN ISRAEL AND PALESTINE
- RELGST 1372 - CATHOLICISM IN THE NEW WORLD
- RELGST 1405 - RELIGION AND SEXUALITY
- RELGST 1415 - RACE AND RELIGION IN AMERICA
- RELGST 1425 - POPULAR RELIGION IN AMERICA
- RELGST 1427 - RELIGION AND LAW
- RELGST 1438 - RELIGION AND POLITICS
- RELGST 1450 - ISLAM, LAW, AND POLITICS
- RELGST 1452 - HYMNS & HIPHOP: SOUNDS OF ISLAM
- RELGST 1518 - RELIGION AND ECOLOGY
- RELGST 1681 - INVENTING ISRAEL: ZIONISM, ANTI-ZIONISM, AND POST-ZIONISM
- RELGST 1725 - DEATH AND HEALTHCARE PROFESSIONS
- RELGST 0760 - RELIGION AND RATIONALITY

Other requirements

Grade requirements: All courses counted toward the major must be taken for a letter grade and completed with a C grade or above. At least five courses and the capstone seminar must be completed on the Oakland campus. Students transferring from other colleges or universities need to consult with the director of undergraduate studies about transferring courses and credits to be applied to the major.

Satisfactory/No Credit option: No more than six credits that count toward the major can be taken on an S/NC basis.

Writing (W) requirement: The capstone seminar fulfills the W-course requirement for this major.

Honors major requirements: Department honors require a GPA of 3.25 or higher in the major and a B+ or above in the capstone seminar.

Minor

Religious Studies Minor

Students pursuing a minor in Religious Studies are required to take complete 15 credits of coursework as follows.

Introductory courses

Students must take two courses from the following list.

- RELGST 0025 - MAJOR BIBLICAL THEMES
- RELGST 0090 - MYTH IN THE ANCIENT NEAR EAST

- RELGST 0105 - RELIGIONS OF THE WEST
- RELGST 0305 - CLASSICS OF CHRISTIAN THOUGHT
- RELGST 0405 - WITCHES TO WALDEN POND
- RELGST 0415 - RELIGION IN MODERN AMERICA
- RELGST 0435 - RELIGION, FILM AND LITERATURE
- RELGST 0455 - INTRODUCTION TO ISLAMIC CIVILIZATION
- RELGST 0505 - RELIGION IN ASIA
- RELGST 0525 - RELIGION AND CULTURE IN EAST ASIA
- RELGST 0715 - PHILOSOPHY OF RELIGION

Religion in the East

Students must take one course from the following list.

- RELGST 1510 - HINDU MYTHOLOGY
- RELGST 1520 - BUDDHISM ALONG THE SILK ROAD
- RELGST 1540 - SAINTS EAST AND WEST
- RELGST 1545 - MYSTICISM IN ASIA
- RELGST 1550 - EAST ASIAN BUDDHISM
- RELGST 1552 - BUDDHIST MEDITATIVE TRADITIONS
- RELGST 1554 - DEATH AND BEYOND IN BUDDHIST CULTURES
- RELGST 1558 - BUDDHISM AND PSYCHOLOGY
- RELGST 1560 - RELIGION AND HEALING IN CHINA
- RELGST 1570 - RELIGION IN JAPAN
- RELGST 1572 - POPULAR RELIGION IN CHANGING JAPAN

Religion in the West

Students must take one of the following courses.

- RELGST 1100 - ISRAEL IN THE BIBLICAL AGE
- RELGST 1120 - ORIGINS OF CHRISTIANITY
- RELGST 1130 - VARIETIES OF EARLY CHRISTIANITY
- RELGST 1135 - ORTHODOX CHRISTIANITY
- RELGST 1142 - THE CONSTRUCTION OF EVIL IN WESTERN RELIGIOUS TRADITIONS
- RELGST 1143 - DEATH IN THE NAME OF GOD
- RELGST 1145 - GRECO-ROMAN RELIGIONS
- RELGST 1151 - DEATH IN THE MEDITERRANEAN WORLD
- RELGST 1160 - JERUSALEM: HISTORY AND IMAGINATION
- RELGST 1210 - JEWS AND JUDAISM IN THE ANCIENT WORLD
- RELGST 1220 - JEWS AND JUDAISM IN THE MEDIEVAL WORLD
- RELGST 1240 - JEWS AND THE CITY
- RELGST 1241 - GENDER AND JEWISH HISTORY
- RELGST 1250 - JEWS AND JUDAISM IN THE MODERN WORLD
- RELGST 1252 - HOLOCAUST HISTORY AND MEMORY
- RELGST 1372 - CATHOLICISM IN THE NEW WORLD
- RELGST 1405 - RELIGION AND SEXUALITY
- RELGST 1425 - POPULAR RELIGION IN AMERICA
- RELGST 1427 - RELIGION AND LAW
- RELGST 1438 - RELIGION AND POLITICS
- RELGST 1450 - ISLAM, LAW, AND POLITICS
- RELGST 1452 - HYMNS & HIPHOP: SOUNDS OF ISLAM
- RELGST 1540 - SAINTS EAST AND WEST
- RELGST 1545 - MYSTICISM IN ASIA
- RELGST 1610 - MYTH, SYMBOL AND RITUAL
- RELGST 1642 - CHRISTIAN-MUSLIM RELATIONS
- RELGST 1644 - CHRISTIAN MUSLIMS JEWS IN THE MIDDLE AGES: CONNECTION & CONFLICT

- RELGST 1645 - THE HISTORICAL JESUS
- RELGST 1681 - INVENTING ISRAEL: ZIONISM, ANTI-ZIONISM, AND POST-ZIONISM
- RELGST 1725 - DEATH AND HEALTHCARE PROFESSIONS
- RELGST 0760 - RELIGION AND RATIONALITY

Upper level elective

Students must take one RELGST course at the 1000-level.

Department of Slavic Languages and Literatures

The Department of Slavic Languages and Literatures offers majors in Russian and Slavic Studies. These majors provide students with the opportunity to study the languages, literatures, and cultures of Russia and of the Slavic-speaking Eastern European countries, including Poland, Ukraine, Slovakia, Serbia, and Croatia.

Students in the Department of Slavic Languages and Literature include those whose primary interest is languages and/or literature, those who wish to enhance their career opportunities in a special way, those who have an interest in the politics and culture of Russia and the Slavic speaking Eastern European countries, and those who have a desire to explore their ethnic heritage. Many majors continue their studies in graduate or professional school and then go on to careers in business, government, teaching, law, medicine, social work, other health-related professions as well as the CIA, FBI and various NGOs and public policy institutions. Knowledge of a Slavic language has been valuable in working in local Western Pennsylvania institutions, politics, business, health-related professions, and the media because of the large population of those ethnicities in this region. Students are advised to begin language study early in order to gain as complete a command of the language as possible. For more information on the Department of Slavic Languages and Literatures and its programs, see www.slavic.pitt.edu.

During the fall and spring terms, the department offers language courses in Russian, Polish, Slovak and Ukrainian, with Serbian and Croatian available through the Language Acquisition Institute. Any student with prior experience in Russian or Ukrainian (including heritage speakers and those who studied a language in high school or abroad) are required to consult with the instructor before being admitted to any language courses in the department. Placement tests are offered to test suitability.

Summer term intensive courses in Russian, Polish, Slovak, Serbian, Croatian, Bulgarian, Macedonian, Ukrainian as well as Romanian and Hungarian are offered through the Slavic Department's Summer Language Institute [SLI]. Summer language courses are intensive and cover an entire year of study. First through fourth year level courses may be offered. These courses afford students the opportunity to make rapid progress through the language in order to qualify for advanced courses and for various study abroad opportunities. Summer study in the SLI now offers the opportunity to study for the first half of the course in Pittsburgh and the second part in the target country, with excursions to major cities and monuments. Scholarships are available for the SLI programs.

Deserving of special mention is the department's program in Slovak language, literature and culture-the only such program in the United States, and one that additionally offers the opportunity for several students each year to study abroad in Slovakia.

Major

Russian, BA

Major Requirements

The Russian major requires at least 33 distributed as follows.

Prerequisite courses

These courses do not count toward the 33 credits required for the major.

- RUSS 0101 - ELEMENTARY RUSSIAN 1
- RUSS 0102 - ELEMENTARY RUSSIAN 2
- RUSS 0103 - INTERMEDIATE RUSSIAN 1
- RUSS 0104 - INTERMEDIATE RUSSIAN 2

Language courses

- RUSS 0400 - ADVANCED RUSSIAN 1
- RUSS 0410 - ADVANCED RUSSIAN 2
- RUSS 1420 - FOURTH-YEAR RUSSIAN 1
- RUSS 1430 - FOURTH-YEAR RUSSIAN 2

Literature and culture courses

- RUSS 0800 - MASTERPIECES 19TH CENTURY RUSSIAN LITERATURE
- RUSS 0810 - MASTERPIECES 20TH CENTURY RUSSIAN LITERATURE
- RUSS 0850 - EARLY RUSSIAN CULTURE
- RUSS 0860 - MODERN RUSSIAN CULTURE
- One 1000-level Russian elective course

Note:

Additional courses at the 1000 level in Russian literature are strongly recommended. Prospective majors are encouraged to take RUSS 0800 - MASTERPIECES 19TH CENTURY RUSSIAN LITERATURE and RUSS 0810 - MASTERPIECES 20TH CENTURY RUSSIAN LITERATURE as early as possible as an introduction to Russian literature.

The following rules and requirements apply to Russian majors.

- Advanced placement assessment and credit by examination may be arranged through consent of the instructor and the department chair.
- RUSS 0800 - MASTERPIECES 19TH CENTURY RUSSIAN LITERATURE and RUSS 0810 - MASTERPIECES 20TH CENTURY RUSSIAN LITERATURE are offered regularly as W courses and will satisfy the departmental W-course requirement.
- A grade of C or better is required in each course that counts toward the major. A grade of B- or better in language courses is required to advance to the next level. A minimum GPA of 2.0 in departmental courses is required for graduation.
- No course that counts toward the major may be taken on an S/NC basis.

Honors in the major

Honors in Russian is granted if, in addition to fulfilling all requirements for the major, the student meets the following conditions.

- Maintain a GPA of 3.75 or higher in RUSS courses.
- Maintain an overall GPA of 3.25 or higher.
- Complete at least one additional RUSS 1000-level course.
- Complete a 20-page paper involving Russian primary-source research and a two-page summary in Russian, under the supervision of an appointed faculty committee.
- Consulted with the undergraduate advisor in their junior year.

Study abroad

Students are encouraged to participate in an approved study-abroad program for a semester or the summer term. The department will adjust the course requirements in individual cases to accommodate this participation without delaying the student's graduation. Majors often apply for Nationality Rooms Program Scholarships for summer study abroad. The Summer Language Institute (SLI) offers generous scholarships as well. The following represents a partial list of study abroad opportunities available to students.

- **Summer study in Moscow:** The Department of Slavic Languages and Literatures currently sponsors a ten-credit summer-study program as part of the SLI in Pittsburgh (5 weeks) and Moscow (5 weeks) at the Moscow State University. Students may study first through fourth year Russian, covering one full year language study in ten weeks. Similar programs exist for study in Poland and Bulgaria. The Slavic department can be reached at 412-624-5096 or via e-mail at slavic@pitt.edu.
- **The University of Pittsburgh** is affiliated with a number of organizations holding both summer and semester, or year-long study in Russia. The Study Abroad Office, located in 802 William Pitt Union, can be reached at 412-647-7413.
- **The Center for Russian, East European, and Eurasian Studies (REEES)** regularly organizes summer study abroad programs in languages and social sciences in locations from the Czech Republic to Slovakia. REEES makes scholarships available for many of these programs. Trevor Erlacher, the REES undergraduate advisor, can be reached at 412-648-7403 or TFE3@Pitt.edu.
- **The Nationality Rooms Program** offers a wide variety of competitive scholarships for summer study abroad in many parts of the world, including Central and Eastern Europe. Applications are due in January. The NRP, located in 1209 CL, can be reached at 412-624-6510.

For more information, see www.slavic.pitt.edu.

Slavic Studies - Option 1, BA

Effective Spring 2018, this program will no longer accept students and will not be active. Students can declare the Slavic Studies major until Fall 2017. The necessary instruction will be available through Summer 2022 for these students to complete the program.

Slavic Studies Major Requirements

Academic requirements for the Slavic Studies major may be fulfilled through one of two options.

Option 1

1. Three to four courses (two years) of a Slavic language above the intermediate level

- RUSS 0400 - ADVANCED RUSSIAN 1
- RUSS 0410 - ADVANCED RUSSIAN 2
- POLISH 0400 - ADVANCED POLISH THROUGH FILM
- POLISH 0410 - ADVANCED POLISH 2
- POLISH 1901 - INDEPENDENT STUDY
  or

- SLOVAK 0400 - ADVANCED SLOVAK 1
- SLOVAK 0410 - ADVANCED SLOVAK 2
- SLOVAK 1901 - INDEPENDENT STUDY
  or

- SERCRO 0400 - ADVANCED BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 5
- SERCRO 0410 - ADVANCED BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 6
- Fourth year Serbian/Croatian (LAI or study abroad)

Note:

1. Eighteen credits of designated Slavic department courses in literature, film, and culture. Students must take three literature courses, one film course, and two courses in Slavic culture. One of the above must be a W-course. *Six credits of Dietrich School courses with a strong Slavic component (courses found in the Russian and East European studies listings) may be substituted, with the advisor's approval.*
2. Six credits of Study Abroad or designated Slavic courses in any of the categories above. If students choose a language course, the number of credits may be six to ten.

Slavic Studies note

The first two years of language study do not count as credits toward the major, unless the first-year language course is taken as part of Option 2.

Slavic Studies - Option 2, BA

Effective Spring 2018, this program will no longer accept students and will not be active. Students can declare the Slavic Studies major until Fall 2017. The necessary instruction will be available through Summer 2022 for these students to complete the program.

Slavic Studies Major Requirements

Academic requirements for the Slavic Studies major may be fulfilled through one of two options.

Option 2

- One year of primary Slavic language above the intermediate level. The language may be Russian, Polish, Slovak, or Bosnian/Serbian/Croatian.
- One year of a second Slavic language at any level. The language can be Russian, Polish, Slovak, Bosnian/Serbian/Croatian, Ukranian, Bulgarian, Macedonian, or Czech.
- Eighteen credits of designated Slavic department courses in literature, film, and culture. Students must take three literature courses, one film course, and two courses in Slavic culture. One of the above must be a W-course. *Six credits of Dietrich School courses with a strong Slavic component (courses found in the Russian and East European studies listings) may be substituted, with the advisor's approval.*
- Six credits of Study Abroad or designated Slavic courses in any of the categories above. If students choose a language course, the number of credits may be six to ten.

Slavic Studies note

The first two years of language study do not count as credits toward the major, unless the first-year language course is taken as part of Option 2.

Minor

Bosnian-Croatian-Serbian Minor

Students may complete this 15-credit minor during the regular academic year or through summer study of the Bosnia-Croatian-Serbian language. *SLAV 1865 may not be used to fulfill a requirement for more than one academic program.*

Option 1: Academic year

- SERCRO 0030 - INTERMEDIATE BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 3
- SERCRO 0040 - INTERMEDIATE BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 4
- SERCRO 0400 - ADVANCED BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 5
- SERCRO 0410 - ADVANCED BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 6

- SLAV 1865 - THE YEAR COMMUNISM CRUMBLED

Option 2: Summer study

Choose one course from each of the following pairs:

- SERCRO 0220 - INTERMEDIATE INTENSIVE SERBIAN
- SERCRO 0223 - INTERMEDIATE INTENSIVE SERBIAN PITT- MONTENEGRO

- SERCRO 0230 - ADVANCED INTENSIVE SERBIAN/CROATIAN
- SERCRO 0231 - ADVANCED INTENSIVE SERBIAN PITT-MONTENEGRO

Polish Minor

Students may complete this 15-credit minor during the regular academic year or through summer study of the Bosnia-Croatian-Serbian language. *SLAV 1865 may not be used to fulfill a requirement for more than one academic program.*

Option 1: Academic year

- POLISH 0030 - INTERMEDIATE POLISH 3
- POLISH 0040 - INTERMEDIATE POLISH 4
- POLISH 0400 - ADVANCED POLISH THROUGH FILM

- POLISH 0410 - ADVANCED POLISH 2

- POLISH 0325 - SHORT STORY IN POLISH CONTEXT or
- POLISH 0870 - CONTEMPORARY POLISH CINEMA:LITERATURE ON FILM or
- POLISH 1260 - SURVEY OF POLISH LITERATURE AND CULTURE

- SLAV 1865 - THE YEAR COMMUNISM CRUMBLED

Option 2: Summer study

Choose one course from each of the following pairs:

- POLISH 0220 - INTENSIVE INTERMEDIATE POLISH
- POLISH 0221 - INTERMEDIATE INTENSIVE POLISH PITT/POLAND

- POLISH 0230 - ADVANCED INTENSIVE POLISH
- POLISH 0233 - ADVANCED POLISH IN POLAND

Slovak Studies Minor - Culture Option

Slovak Studies minor

An undergraduate minor in Slovak studies motivates students to continue with their language and culture studies in a meaningful way. This program would be particularly useful for students majoring in anthropology, political science, and history, many of whom focus their work on Slovakia or Central Europe and see Slovak language and culture as a gateway to the study of the area. Several of the graduates with considerable work in Slovak at Pitt have been offered jobs at the Pentagon, international nonprofit and nongovernmental organizations (NGOs), Radio Free Europe, and the U.S. Department of State.

Students who are interested in the minor may tailor their course selections according to the focus of their interest in the Slovak language or in Slovak culture.

Culture Option

The Slovak culture option requires the following distribution of courses for a total of 17 credits.

- SLOVAK 0010 - ELEMENTARY SLOVAK 1
- SLOVAK 0020 - ELEMENTARY SLOVAK 2

Three of the following

- SLOVAK 0030 - INTERMEDIATE SLOVAK 3
- SLOVAK 0380 - SLOVAK TRANSATLANTIC CULTURES
- SLOVAK 0890 - SLOVAK, CZECH, AND CENTRAL EUROPEAN FILM
- SLOVAK 1250 - A CULTURAL HISTORY OF SLOVAKIA

Slovak Studies Minor - Language Option

Slovak Studies minor

An undergraduate minor in Slovak studies motivates students to continue with their language and culture studies in a meaningful way. This program would be particularly useful for students majoring in anthropology, political science, and history, many of whom focus their work on Slovakia or Central Europe and see Slovak language and culture as a gateway to the study of the area. Several of the graduates with considerable work in Slovak at Pitt have been offered jobs at the Pentagon, international nonprofit and nongovernmental organizations (NGOs), Radio Free Europe, and the U.S. Department of State.

Students who are interested in the minor may tailor their course selections according to the focus of their interest in the Slovak language or in Slovak culture.

Language Option

The Slovak language option requires the following distribution of courses for a total of 17 credits.

- SLOVAK 0010 - ELEMENTARY SLOVAK 1
- SLOVAK 0020 - ELEMENTARY SLOVAK 2
- SLOVAK 0030 - INTERMEDIATE SLOVAK 3
- SLOVAK 0040 - INTERMEDIATE SLOVAK 4
- SLOVAK 0400 - ADVANCED SLOVAK 1

Department of Sociology

This is an exciting time of dramatic social change, both nationally and internationally. Global processes are integrating the world and creating the "global village." At the same time, old hostilities based on ethnic solidarity are re-emerging and tearing the social fabric of various parts of the world. The U.S. economy is undergoing structural change, which, in turn, is altering the occupational structure; the United States is becoming more multicultural, and the meanings of "community" are shifting. In these changes there are huge benefits for some and heavy costs for others. "Social problems" (e.g., health care availability, poverty, crime, or threats to the environment) are not marginal to societies but integral to them.

Sociologists try to understand these phenomena. For some, this means informing public policy; for others, the social world is simply one of the most interesting things to study. Sociologists study social organization. For some, this means examining societies-how they are structured, how they work, and how they change. Other sociologists study how small social groups work and how they change. This includes the social networks that people form as part of their social life. Issues of race, class, and gender affect the opportunities and constraints faced by different groups in society. Sociologists study how people belong to families, groups, and organizations-how people develop identities and how their social organizations become real. Sociologists also focus on broad patterns of social organization socialization, education, welfare, health care, etc. In short, the social world is endlessly fascinating.

For more information on the sociology major, the sociology minor, and the Department of Sociology, see www.sociology.pitt.edu.

Major

Sociology, BA

Major Requirements

A total of 27 credits in sociology and four credits in statistics, distributed as follows, are required for completion of the major.

Introductory course

Choose one of the following courses.

- SOC 0002 - SOCIOLOGY OF EVERYDAY LIFE
- SOC 0005 - SOCIETIES
- SOC 0010 - INTRODUCTION TO SOCIOLOGY

Theory and Research courses

Complete both of the following courses.

- SOC 0230 - SOCIAL RESEARCH METHODS
- SOC 0150 - SOCIAL THEORY

Statistics course

Choose one of the following courses.

- STAT 0200 - BASIC APPLIED STATISTICS
- STAT 1000 - APPLIED STATISTICAL METHODS

Research Practicum

Students must complete the introductory, theory and research, and statistics courses before enrolling in the required research practicum.

- SOC 1500 - CAPSTONE RESEARCH PRACTICUM FOR MAJORS

Elective courses

Students are required to complete a minimum of 15 elective credits in SOC, six of which must be at the 1000 level. Internships and directed research do not count toward the six 1000-level elective credits.

Additional information

Grade requirements: A minimum GPA of 2.0 or higher in departmental courses is required for graduation.

Satisfactory/No Credit option: No more than six credits in SOC can be taken on an S/NC basis. After declaring the major, SOC 0150 and SOC 0230 may not be taken on an S/NC basis.

Writing (W) requirement: Students must complete at least one W-course in the major.

Honors major requirement: Honors in sociology is granted if in addition to fulfilling all requirements for the major, the student:

- maintained a GPA of 3.5 or above in SOC courses;
- maintained an overall GPA of 3.25 or above;
- completed SOC 0150 and SOC 0230 prior to completing a three-credit SOC 1002 honors seminar; and
- completed a three-credit SOC honors thesis, written under the direction of a faculty mentor.

The honors seminar, which is offered every fall term, and the honors thesis, which is offered every spring term, may replace six of the 15 required elective credits. Students pursuing the honors major are required to complete the same number of credits that are required for the standard major. For additional details, students are encouraged to consult with the undergraduate advisor.

Thematic cluster certificate: For sociology majors wishing to pursue specific themes within the discipline, the Department of Sociology currently offers five thematic clusters. Upon graduation, students who have completed three approved courses in one of these clusters will be awarded a certificate of achievement by the Department of Sociology.

- Global and Area Studies
- Social Movements / Inequality
- Race, Gender, and Sexuality
- The Helping Professions
- Health, Environment, and Technology

Internships: The Department of Sociology at the University of Pittsburgh is strongly committed to the career development of its students and sponsors a wide variety of strategic internships. Numerous local internship opportunities exist, involving childhood counseling and education, hospitals and healthcare, psychological and substance abuse counseling, criminal justice, business, law, and politics.

Courses for special programs

The Department of Sociology offers courses that are particularly suitable for the following special programs.

Pre-Law

- SOC 0471 - DEVIANCE AND SOCIAL CONTROL
- SOC 0472 - INTRODUCTION TO CRIMINOLOGY
- SOC 0474 - SOCIETY AND THE LAW

Pre-Social Work

- SOC 0424 - SMALL GROUPS
- SOC 0438 - SOCIOLOGY OF THE FAMILY
- SOC 0460 - RACE AND ETHNICITY
- SOC 0471 - DEVIANCE AND SOCIAL CONTROL
- SOC 0477 - MEDICAL SOCIOLOGY
- SOC 1413 - MARRIAGE
- SOC 1450 - HEALTH AND ILLNESS

Pre-Medical

- SOC 0312 - SCIENCE IN SOCIETY
- SOC 0475 - SOCIOLOGY OF AGING
- SOC 0477 - MEDICAL SOCIOLOGY
- SOC 1370 - GENDER AND HEALTH WORLDWIDE
- SOC 1450 - HEALTH AND ILLNESS
- SOC 1467 - TOPICS MENTAL HEALTH AND ILLNESS
- SOC 1488 - HISTORY MEDICINE AND HEALTH CARE

Gender, Sexuality, and Women's Studies

- SOC 0436 - SOCIAL ASPECTS OF SEXUALITY
- SOC 0446 - SOCIOLOGY OF GENDER
- SOC 1333 - COMPARATIVE PERSPECTIVES ON WOMEN
- SOC 1365 - RACE, CLASS, AND GENDER
- SOC 1448 - WORKING WOMEN

Minor

Sociology Minor

Minor Requirements

A minor in sociology requires the following distribution of courses for a total of 15 credits:

- SOC 0150 - SOCIAL THEORY
- SOC 0230 - SOCIAL RESEARCH METHODS
- An elective in sociology
- One elective upper-level sociology course (1000-2000)

One of the Following Courses

- SOC 0002 - SOCIOLOGY OF EVERYDAY LIFE
- SOC 0005 - SOCIETIES
- SOC 0010 - INTRODUCTION TO SOCIOLOGY

Department of Statistics

The field of statistics is concerned with ways of understanding variability in measurements. It is the science and art of making informed decisions in the face of uncertainty. Statistical reasoning is fundamental to research in many scientific fields. For example, probabilistic models of learning are used in education and psychology, and time series and regression models guide research in engineering, chemistry, economics, biology, and medicine. Recent high-profile court cases have shown the importance of the use of probability and statistics in law, especially in the fields of forensic medicine and DNA fingerprinting. Statisticians have also been instrumental in developing methods by which observations are obtained in many disciplines. Examples include randomized clinical trials in medicine and complex sampling surveys in social and political science. Probability and statistics are basic to the actuarial sciences. When lists are compiled of the most important scientific theories and discoveries of the last century, a substantial number of these developments are seen to be inherently statistical in nature.

The Department of Statistics offers course work leading to a Bachelor of Science degree in statistics, a minor in applied statistics, and a combined five-year bachelor and master's degree in statistics. The department also offers a wide array of introductory service courses for general undergraduate audiences that deal with statistical methods in applications (and which require only high school mathematics). A joint major in economics and statistics is also available. Interested students should consult the requirements listed under Economics. Students considering majoring in statistics should consult with a department advisor early in their studies, preferably during their freshman year. For more information on the major, other programs, and the Department of Statistics, visit www.stat.pitt.edu.

Major

Statistics, BS

Requirements for a BS in Statistics

The statistics major requires a minimum of 50 credits, including the following required courses:

Required Course

- STAT 1000 - APPLIED STATISTICAL METHODS *

Note:

* With approval of the major advisor, students may substitute STAT 1000 under the following conditions.

- Complete STAT 0200 with a grade of B- or better; or
- Receive advanced placement for STAT 0200; or
- Complete STAT 1100 if the student is a Statistics-Business dual major.

All of the Following Courses

- STAT 1221 - APPLIED REGRESSION
- STAT 1223 - APPLIED REGRESSION WRITING COMPONENT
- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Two of the Following Introductory Applied Statistics Courses

- STAT 1201 - APPLIED NONPARAMETRIC STATISTICS
- STAT 1211 - APPLIED CATEGORICAL DATA ANLYSIS
- STAT 1251 - STATISTICAL QUALITY CONTROL
- STAT 1241 - APPLIED SAMPLING
- STAT 1251 - STATISTICAL QUALITY CONTROL

One Intermediate Applied Statistics Course from the Following List:

- STAT 1301 - STATISTICAL PACKAGES
- STAT 1311 - APPLIED MULTIVARIATE ANALYSIS
- STAT 1321 - APPLIED TIME SERIES

Both of the Following Courses

- STAT 1631 - INTERMEDIATE PROBABILITY
- STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL

One Statistics Course from the Following List

- STAT 1651 - INTRODUCTION TO BAYESIAN STATISTICS
- STAT 1731 - STOCHASTIC PROCESSES
- STAT 1741 - APPLIED PROBABILITY THEORY

Mathematics Courses:

Choose one group.

Group 1

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

Group 2

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0235 - HONORS 1 - VARIABLE CALCULUS
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

One of the Following Courses

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- MATH 1180 - LINEAR ALGEBRA 1
- MATH 1185 - HONORS LINEAR ALGEBRA

Elective Courses

Because professional statisticians collaborate with other scientists, students are encouraged to take elective courses from the behavioral, natural, physical, and social sciences.

Additional Requirements

- **Grade requirements:** Students must earn at least a C grade in each course required for the major.
- **Satisfactory/No Credit:** Students may not take required courses on the S/NC option.
- **Writing requirement:** Courses in technical writing and public speaking are recommended.
- **Graduate study recommendations:** Students planning to continue their studies in a graduate program are strongly encouraged to take MATH 0413 - INTRO THEORETICAL MATHEMATICS, MATH 0420 - INTRO THEORY 1-VARIABLE CALCULUS, MATH 1180 - LINEAR ALGEBRA 1, and as many additional mathematics courses in advanced calculus, numerical analysis, and computer sciences as possible.
- **Departmental honors:** In order to qualify for departmental honors at graduation, students must:
    - have a GPA of at least 3.50 in all mathematics and statistics courses taken;
    - have a GPA of at least 3.70 in all 1000-level courses taken within the department; and
    - complete all other requirements for the statistics major.

Minor

Applied Statistics Minor

Requirements for a Minor in Applied Statistics

Professionals in many fields use statistical procedures regularly. Decisions based on numerical information or data, if the data are collected and analyzed properly, are typically better decisions. The minor in applied statistics was designed to give students additional statistical tools and a better understanding of statistical reasoning.

The minor in applied statistics requires 16 credits, consisting of the following courses

- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1221 - APPLIED REGRESSION
- Three additional STAT courses at the 1200-level or higher

Note

- Acceptable substitutes for STAT 1000 - APPLIED STATISTICAL METHODS include STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT, ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1, and STAT 0200 - BASIC APPLIED STATISTICS.
- STAT 1223 - APPLIED REGRESSION WRITING COMPONENT does not count toward the minor.

Joint Major

Statistics, BS/MA

Requirements for a Combined Five-Year Bachelor's and Master's Degree in Statistics

Admission to the program requires the approval of both the undergraduate and graduate directors. The minimum requirements for admission are:

1. Two letters of recommendation,
2. minimum high school GPA of 3.25 or top 10 percent of class, and
3. an SAT score of at least 1270 with a math score of at least 650.

Requirements for a Combined BS and MA in Statistics

1. Introductory Mathematics Courses:

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- MATH 1180 - LINEAR ALGEBRA 1

2.

- STAT 1000 - APPLIED STATISTICAL METHODS
- STAT 1221 - APPLIED REGRESSION
- STAT 1223 - APPLIED REGRESSION WRITING COMPONENT where STAT 1223 is a W (writing) course

3. Three Introductory Applied Statistics Courses from the Following List:

- STAT 1201 - APPLIED NONPARAMETRIC STATISTICS
- STAT 1211 - APPLIED CATEGORICAL DATA ANLYSIS
- STAT 1251 - STATISTICAL QUALITY CONTROL
- STAT 1241 - APPLIED SAMPLING

- STAT 1251 - STATISTICAL QUALITY CONTROL
- STAT 1291 - TOPICS APPLIED STATISTICS 1
- STAT 1292 - TOPICS IN APPLIED STATISTICS 2
- STAT 1293 - TOPICS IN APPLIED STATISTICS 3
- STAT 1294 - TOPICS IN APPLIED STATISTICS 4

4. One Intermediate Applied Statistics Course from the Following List:

- STAT 1301 - STATISTICAL PACKAGES
- STAT 1311 - APPLIED MULTIVARIATE ANALYSIS
- STAT 1321 - APPLIED TIME SERIES

5.

- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

6.

- STAT 1631 - INTERMEDIATE PROBABILITY
- STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL

7.

- STAT 2131 - APPLIED STATISTICAL METHODS 1
- STAT 2132 - APPLIED STATISTICAL METHODS 2

8.

- STAT 2381 - SUPERVISED STATISTICAL CONSULTING

9. Electives in Statistics:

Three additional courses, at least two of which must be graduate-level courses. STAT 2711 and 2712 are excluded, and courses at the 3000 level must be approved by the student's advisor

10.

One graduate-level course from outside of the department, chosen in consultation with the graduate advisor

11.

Master's pass on Preliminary Examination

Requirements for a Combined BS and MS in Statistics

Requirements one through 11 as above, except that requirement nine is reduced to one undergraduate or graduate course. In addition, the student must write and successfully defend a master's thesis.

- Grade requirement: Students in the program must earn at least a B grade in each required course as well as maintain a 3.25 GPA.

Typical Schedule

First Year:

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- STAT 1000 - APPLIED STATISTICAL METHODS
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- STAT 1221 - APPLIED REGRESSION
- STAT 1223 - APPLIED REGRESSION WRITING COMPONENT

Second Year:

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- STAT 1200-level course
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- STAT 1200-level course

Third Year:

- STAT 1151 - INTRODUCTION TO PROBABILITY
- STAT 1200-level course
- STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS
- STAT 1300-level course

Fourth Year:

- STAT 1631 - INTERMEDIATE PROBABILITY
- STAT 2131 - APPLIED STATISTICAL METHODS 1
- STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL
- STAT 2000-level course
- STAT 2132 - APPLIED STATISTICAL METHODS 2

Fifth Year:

- Take Comprehensive Exam
- STAT 2381 - SUPERVISED STATISTICAL CONSULTING
- Two STAT electives or master's thesis
- One outside graduate-level course

Comparison of Programs

Separately, the Bachelor of Science in statistics requires 50 credits, and the Master of science in applied statistics requires 33 credits, of which 21 must be graduate level. The combined program requires 69 credits, of which 18 must be graduate level.

Department of Studio Arts

The practice of art is among the oldest and most fundamental forms of human expression. The Department of Studio Arts provides the opportunity for students to explore the visual arts through foundation courses and through upper-level courses in painting, sculpture, drawing, printmaking, and graphic design. Studio activities are designed to intensify students' visual perception of the formal and expressive means of art, to develop understanding of a variety of technical processes, and to encourage insight into the significance of making art today. Course offerings of the department address the following goals:

- Provide a degree program for art majors who desire a liberal education and want to prepare for graduate art school or pursue a career in an art-related field;
- Provide a related area in studio arts for majors in other departments by taking the four foundation courses or by completing 12 credits in a specified studio area;

- Facilitate development of art-making skills and concepts through the foundation courses for all undergraduate students, while satisfying the Dietrich School creative expression requirement; and
- Provide a 15-credit minor in studio arts.

The Department of Studio Arts sponsors an annual student exhibition and a biannual faculty exhibition in the University of Pittsburgh Art Gallery. The University's Frick Fine Arts Library is one of the finest available. Also in close proximity is The Carnegie, with its museum and library providing access for research and study. For more information on the major, the minor, and the Department of Studio Arts, see http://www.studioarts.pitt.edu/.

Major

Studio Arts, BA

Major Requirements

The studio arts major requires the completion of 52 credits - 46 credits in studio arts, and six credits in art history, distributed as described.

Foundation Courses

- SA 0110 - VISUAL THINKING
- SA 0120 - PAINTING STUDIO 1
- SA 0130 - DRAWING STUDIO 1
- SA 0140 - SCULPTURE STUDIO 1
- SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1

Upper-Level Required Courses

- SA 1220 - PAINTING STUDIO 2
- SA 1230 - DRAWING STUDIO 2
- SA 1240 - SCULPTURE STUDIO 2
- SA 1260 - PRINT STUDIO: INTAGLIO
- SA 1270 - DIGITAL STUDIO: IMAGING
- SA 1370 - PREPARATION AND PRACTICE IN THE VISUAL ARTS
- SA 1600 - SENIOR SEMINAR
- SA 1604 - SENIOR EXHIBITION

Upper-Level Elective Courses

Students must take three courses from the following list, for a total of nine credits.

Directed study, internships, and undergraduate teaching assistantships are by permission only. Students must have completed at least 30 credits in Studio Arts courses. Students may apply up to three credits of internship or undergraduate teaching assistantship toward their major requirements.

- SA 1320 - PAINTING STUDIO: PROJECTS
- SA 1330 - DRAWING STUDIO: PROJECTS
- SA 1340 - SCULPTURE STUDIO: PROJECTS
- SA 1345 - SCULPTURE STUDIO: INSTALLATION
- SA 1365 - PRINT STUDIO: SCREENPRINT
- SA 1380 - DIGITAL STUDIO: VIDEO
- SA 1430 - DRAWING STUDIO: PERSPECTIVE
- SA 1450 - PAINTING STUDIO: FIGURE
- SA 1504 - DIRECTED STUDY: STUDIO
- SA 1900 - INTERNSHIP
- SA 1904 - UNDERGRADUATE TEACHING ASSISTANTSHIP
- HONORS 1542 - HONORS FIELD STUDIES IN WYOMING - STUDIO ARTS

History of Art and Architecture Required Courses

- HAA 0010 - INTRODUCTION TO WORLD ART

History of Art and Architecture Additional Courses

Students must take one of the two following HAA courses.

- HAA 0030 - INTRODUCTION TO MODERN ART
- HAA 0090 - INTRODUCTION TO CONTEMPORARY ART

Writing course requirement

Students must complete an HAA course with a W practicum or stand-alone HAA W-course to satisfy this requirement.

Additional Requirements

- **Grade requirement:** Students must attain at least a 2.00 GPA in the major.
- **Satisfactory/No Credit option:** No department course that counts toward the major may be taken on the S/NC basis. Credit by exam is generally not available.
- **Departmental honors:** Students who earn a 3.50 GPA in the major and an overall 3.25 GPA receive departmental honors.
- **Senior art exhibition:** Seniors are expected to exhibit their work in the Annual Student Exhibition at the University of Pittsburgh Art Gallery.
- **Additional opportunities**
    - In addition to required courses, focus in a particular medium is possible through directed study. Internships are also available in art-related fields.
    - Majors may take special workshops and courses when offered, but only if they have fulfilled the prerequisites, or by departmental permission. The department recommends that a student take no more than two studio arts courses in one term.

Courses for Non-Studio Arts Majors

All level-one core courses are open to non-art majors. Non-art majors may take level-two courses but must complete the prerequisites for the specific courses. Non majors may take special workshops and advanced courses when offered, but only if they have fulfilled the prerequisites, or by departmental permission.

Minor

Studio Arts Minor - Option 1

This minor requires completion of 15 credits of coursework. Students must take both required courses and any three Studio Arts courses listed on the introductory and upper-level course lists.

Studio Arts Minor Requirements

Additional information and requirements

- All courses that count toward the minor must be taken for a letter grade.
- Only six of the fifteen credits required for the minor may be transfer credits.
- The number of upper-level cours sections offered per term is limited, as is the frequency of 1300-level and 1400-level courses. Course enrollment is based on availability as well as the completion of prerequisites.
- The Department of Studio ARts recommends that students complete SA 0110 - VISUAL THINKING and SA 0130 - DRAWING STUDIO 1 before enrolling in SA 0120 - PAINTING STUDIO 1.

Required introductory courses

These courses are required for both options.

- SA 0110 - VISUAL THINKING
- SA 0130 - DRAWING STUDIO 1

Additional introductory Studio Arts courses

- SA 0120 - PAINTING STUDIO 1
- SA 0140 - SCULPTURE STUDIO 1
- SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1

Upper-level Studio Arts courses

- SA 1220 - PAINTING STUDIO 2
- SA 1230 - DRAWING STUDIO 2
- SA 1240 - SCULPTURE STUDIO 2
- SA 1260 - PRINT STUDIO: INTAGLIO
- SA 1270 - DIGITAL STUDIO: IMAGING
- SA 1320 - PAINTING STUDIO: PROJECTS
- SA 1330 - DRAWING STUDIO: PROJECTS
- SA 1340 - SCULPTURE STUDIO: PROJECTS
- SA 1345 - SCULPTURE STUDIO: INSTALLATION
- SA 1365 - PRINT STUDIO: SCREENPRINT
- SA 1380 - DIGITAL STUDIO: VIDEO
- SA 1430 - DRAWING STUDIO: PERSPECTIVE
- SA 1450 - PAINTING STUDIO: FIGURE

Studio Arts Minor - Option 2

This minor requires completion of 15 credits of coursework. Students must take both required courses, any two Studio Arts courses listed on the introductory and upper-level course lists, and a History of Art and Architecture course on any topic and at any level.

Studio Arts Minor Requirements

Additional information and requirements

- All courses that count toward the minor must be taken for a letter grade.
- Only six of the fifteen credits required for the minor may be transfer credits.
- The number of upper-level cours sections offered per term is limited, as is the frequency of 1300-level and 1400-level courses. Course enrollment is based on availability as well as the completion of prerequisites.
- The Department of Studio ARts recommends that students complete SA 0110 - VISUAL THINKING and SA 0130 - DRAWING STUDIO 1 before enrolling in SA 0120 - PAINTING STUDIO 1.

Required introductory courses

These courses are required for both options.

- SA 0110 - VISUAL THINKING
- SA 0130 - DRAWING STUDIO 1

Additional introductory Studio Arts courses

- SA 0120 - PAINTING STUDIO 1
- SA 0140 - SCULPTURE STUDIO 1
- SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1

Upper-level Studio Arts courses

- SA 1220 - PAINTING STUDIO 2
- SA 1230 - DRAWING STUDIO 2
- SA 1240 - SCULPTURE STUDIO 2
- SA 1260 - PRINT STUDIO: INTAGLIO
- SA 1270 - DIGITAL STUDIO: IMAGING
- SA 1320 - PAINTING STUDIO: PROJECTS
- SA 1330 - DRAWING STUDIO: PROJECTS
- SA 1340 - SCULPTURE STUDIO: PROJECTS
- SA 1345 - SCULPTURE STUDIO: INSTALLATION
- SA 1365 - PRINT STUDIO: SCREENPRINT
- SA 1380 - DIGITAL STUDIO: VIDEO
- SA 1430 - DRAWING STUDIO: PERSPECTIVE
- SA 1450 - PAINTING STUDIO: FIGURE

History of Art and Architecture course

Students must take one History of Art and Architecture course on any topic and at any level.

Department of Theatre Arts

The Department of Theatre Arts offers training in both the practical and academic aspects of theatre. Undergraduates may specialize in acting, directing, design and technical theatre, theatre history and criticism, or any combination of these.

While the department is not a professional school, the presence of strong graduate programs creates the atmosphere of professional training. Instead of the protected environment of a conservatory, undergraduate theatre training at Pitt takes place within the context of the liberal-arts experience at a large, urban university.

The department recommends that students declare this major as early as possible. For more information, please contact the Director of Undergraduate Studies, Don Mangone at dmangone@pitt.edu.

Major

Theatre Arts, BA

The Department of Theatre Arts offers training in both the practical and academic aspects of theatre. Undergraduates may specialize in acting, directing, design and technical theatre, theatre history and criticism, or any combination of these areas. While the department is not a professional school, the presence of strong graduate programs creates the atmosphere of professional training. Instead of the protected environment of a conservatory, undergraduate theatre training at Pitt takes place within the context of the liberal-arts experience at a large, urban university. The department recommends that students declare this major as early as possible. For more information, please contact the department's Director of Undergraduate Studies.

This major requires 42 credits of course work as follows.

Introductory course

- THEA 0810 - INTRODUCTION TO DRAMATIC ART

Performance courses

Choose three of the following courses.

- THEA 0804 - THEATRE AND COLLABORATION
- THEA 0830 - INTRODUCTION TO PERFORMANCE

- THEA 1100 - VOICE AND MOVEMENT 1
- THEA 1101 - VOICE AND MOVEMENT 2
- THEA 1102 - ACTING 1
- THEA 1103 - ACTING 2
- THEA 1104 - ACTING 3
- THEA 1110 - DIRECTING 1
- THEA 1111 - DIRECTING 2
- THEA 1229 - STAGE MANAGEMENT 1
- THEA 1338 - MUSICAL THEATRE PERFORMANCE
- THEA 1392 - SPECIAL TOPICS IN PERFORMANCE

Design/Technical courses

- THEA 0842 - INTRODUCTION TO STAGECRAFT
- THEA 0880 - THEATRICAL PRODUCTION
  Students will take this course three times: once as Construction; and twice as Run Crew.
- THEA 1240 - COSTUME PRODUCTION AND TECHNOLOGY

Choose one of the following courses

- THEA 0840 - INTRODUCTION TO THEATRE DESIGN
- THEA 1230 - STAGE LIGHTING 1
- THEA 1235 - SCENE DESIGN 1
- THEA 1246 - COSTUME DESIGN 1

Playwriting, History, and Criticism

Choose two of the following courses

- THEA 1341 - WORLD THEATRE: 500 BCE TO 1640
- THEA 1342 - WORLD THEATRE: 1640 TO 1890
- THEA 1343 - WORLD THEATRE: 1890-Present

The following writing-intensive course is required.

- THEA 1903 - SEMINAR IN THEATRE ARTS

Choose one elective from the Playwriting, History, and Criticism category

- THEA 0505 - ENJOY PERFORMANCES
- THEA 0825 - CONTEMPORARY GLOBAL STAGES
- THEA 1341 - WORLD THEATRE: 500 BCE TO 1640
- THEA 1342 - WORLD THEATRE: 1640 TO 1890
- THEA 1343 - WORLD THEATRE: 1890-Present
- THEA 1365 - PLAYWRITING 1 (writing-intensive)
- THEA 1366 - PLAYWRITING 2 (writing-intensive)
- THEA 1390 - NEW PLAY PRACTICUM

Elective course

Students must take one course selected from offerings in Performance, Design / Tech, or Playwriting / History / Criticism. Directed study (THEA 1480 - THEA 1485) and independent study (THEA 1900) courses cannot be used to satisfy this requirement.

Additional Requirements

- **Declaring the major:** Students are encouraged to declare this major early and register with the departmental advisor.
- **Grade requirement:** A minimum cumulative average of a C (2.0) or better in all departmental courses and any individual class required of the major must be at least a C- (1.75) or better.
- **Satisfactory/No Credit option:** Students must check with the program advisor to determine the appropriateness of using the Satisfactory/No Credit (S/NC) grade option in departmental courses. No more than two courses in the major may be taken on an S/NC basis.

For more information on the major and the Department of Theatre Arts, visit their Web site.

Minor

Theatre Arts Minor

Minor Requirements

Required Courses for the Minor

- THEA 0880 - THEATRICAL PRODUCTION : Run Crew

Choose two of the following courses

These courses cannot count for both the required course and the nine credits of theatre electives.

- THEA 0505 - ENJOY PERFORMANCES
- THEA 0804 - THEATRE AND COLLABORATION
- THEA 0810 - INTRODUCTION TO DRAMATIC ART

Choose three courses from any remaining theatre courses listed.

- THEA 0505 - ENJOY PERFORMANCES
- THEA 0804 - THEATRE AND COLLABORATION
- THEA 0810 - INTRODUCTION TO DRAMATIC ART
- THEA 0825 - CONTEMPORARY GLOBAL STAGES
- THEA 0830 - INTRODUCTION TO PERFORMANCE
- THEA 0840 - INTRODUCTION TO THEATRE DESIGN
- THEA 0842 - INTRODUCTION TO STAGECRAFT
- THEA 0880 - THEATRICAL PRODUCTION
- THEA 1100 - VOICE AND MOVEMENT 1
- THEA 1101 - VOICE AND MOVEMENT 2
- THEA 1102 - ACTING 1
- THEA 1103 - ACTING 2
- THEA 1104 - ACTING 3
- THEA 1110 - DIRECTING 1
- THEA 1111 - DIRECTING 2
- THEA 1227 - SCENE PAINTING
- THEA 1229 - STAGE MANAGEMENT 1
- THEA 1230 - STAGE LIGHTING 1
- THEA 1235 - SCENE DESIGN 1
- THEA 1240 - COSTUME PRODUCTION AND TECHNOLOGY
- THEA 1245 - STAGE MAKEUP
- THEA 1246 - COSTUME DESIGN 1

- THEA 1338 - MUSICAL THEATRE PERFORMANCE
- THEA 1341 - WORLD THEATRE: 500 BCE TO 1640
- THEA 1342 - WORLD THEATRE: 1640 TO 1890
- THEA 1343 - WORLD THEATRE: 1890-Present
- THEA 1365 - PLAYWRITING 1
- THEA 1366 - PLAYWRITING 2
- THEA 1390 - NEW PLAY PRACTICUM
- THEA 1391 - SPECIAL TOPICS: THEATRE DESIGN
- THEA 1392 - SPECIAL TOPICS IN PERFORMANCE
- THEA 1480 - DIRECTED PROJECT SCENERY/PROPS
- THEA 1481 - DIRECTED PROJECT COSTUME/MAKEUP
- THEA 1482 - DIRECTED PROJECT LIGHTING/SOUND
- THEA 1483 - DIRECTED PROJECT DIRECTING/PERF
- THEA 1484 - DIRECTED PROJECT BUSINESS MGT
- THEA 1485 - DIRECTED PROJECT STAGE MANAGEMENT
- THEA 1500 - MODERN ACTING
- THEA 1501 - SHAKESPEARE ACTING
- THEA 1903 - SEMINAR IN THEATRE ARTS

Urban Studies Program

While urban studies is not a department, it is an administrative unit offering a major in urban studies for students who have an interest in unraveling the complexities of the urban world. The major is interdisciplinary, meaning that students learn about cities as historical, social, cultural, economic, and political phenomena. The major is "real world" in the sense that students apply what they learn to the world beyond the classroom. Finally, the major is career oriented in that, after graduation, students attempt to find roles for themselves in the urban environment. To accomplish all of these goals, the urban studies curriculum integrates "knowing" with "doing." The major combines courses offered by the program with courses offered through other social science departments. For more information, see www.urbanstudies.pitt.edu.

Major

Urban Studies, BA

The Urban Studies Program offers a major for students who have an interest in unraveling the complexities of the urban world. The major is interdisciplinary, meaning that students learn about cities as historical, social, cultural, economic, and political phenomena. The major is real world, meaning that students take this learning with them and apply it to the world beyond the classroom. Finally, the major is career-oriented, meaning that students attempt to find a role for themselves in the urban environment. To accomplish all of these goals, the Urban Studies Program has designed a curriculum which integrates knowing with doing. The urban studies major combines courses offered by the program itself with courses offered through other social science departments. Students are encouraged to take URBNST 0010 Introduction to Urban Studies as early as possible, ideally in the fall or spring of the freshman year, and to develop a broad background in the social sciences among lower-level social science courses.

The Urban Studies major requires the completion of 36 credits distributed as follows.

Major Requirements

Core courses

All of the following courses; these courses should be completed early in the student's academic program

- URBNST 0010 Introduction to Urban Studies
- URBNST 0030 Introduction to GIS
- URBNST 0050 Introduction to Urban Research
- URBNST 0070 Urban Social Theory

Intermediate Electives

Students must take at least four courses according to the following guidelines.

Urban Studies courses

At least two of the following Urban Studies courses.

- URBNST 0100 World Urban Patterns
- URBNST 0108 Urban Economic Geography
- URBNST 0112 Social Justice and the City
- URBNST 0114 Urban Sustainability
- URBNST 0120 Urban Geography
- URBNST 0130 Applied GIS
- URBNST 0140 Crime and Punishment
- URBNST 0150 GIS & Community Data
- URBNST 0160 Data Visualization

Other electives

At least one of the following courses

- URBNST 0200 Internship
- URBNST 0400 'Global City' Study Abroad Courses
- URBNST 0413 Sustainable Cities 1
- URBNST 0415 Sustainable Cities 2
- URBNST 0600 Independent Research
- URBNST 0810 Field Analysis of Global Urbanism
- URBNST 0820 Advanced International Field Placement
- ARC 0110 Approaches to the Built Environment
- COMMRC 1103 Rhetoric and Culture
- ECON 0230 Introduction to Public Economics
- ENGLIT 0628 Working Class Literature
- FR 0017 Paris: Urbanism Past and Present
- HIST 1019 Cities in Historical Perspective
- PUBSRV 0030 Public Policy Process
- SOC 0444 Urban Sociology

Advanced Electives

Advanced elective courses

Students must take three courses according to the following guidelines.

Urban Studies courses

Advanced Urban Studies courses; choose two courses

- URBNST 0300 Remaking Cities
- URBNST 0320 US Housing & Property
- URBNST 0340 Urban Ethnography
- URBNST 0360 International Urbanism
- URBNST 0380 Field Research Seminar
- URBNST 0710 Urban Culture: Special Topics
- URBNST 0750 Urban Methods: Special Topics
- URBNST 0770 Urban Theory: Special Topics

Other electives

Advanced courses from another discipline; choose one course.

- ANTH 1530 Origins of Cities
- ARC 0300 Intro to Historic Preservation
- ARC 1180 World Cities
- ARC 1181 Pittsburgh Arch. & Urbanism
- HIST 1135 Berlin: History of a European Metropolis
- JS 1160 Jerusalem: History and Imagination
- PS 1251 Urban Government and Politics
- PUBSRV 1100 Practices in Public Administration
- SOC 1286 Race and the City
- SOCWRK 1000 Introduction to Social Work
- SOC 1476 Urban Policy and Planning

Capstone course

- URBNST 0900 Urban Studies Research Seminar

Additional Requirements

Grade requirements: A minimum GPA of 2.0 in departmental and concentration courses is required for graduation.

Satisfactory/No Credit option: There is no limit to the number of courses in the major that can be taken on an S/NC basis.

Writing requirement: Students must complete one W-course in the major. URBNST 0900 Urban Studies Research Seminar fulfills this requirement.

Study abroad: It would be desirable for students to add an international dimension to their undergraduate education through their participation in a study abroad program.

Urban Students Association: The Urban Students Association (U.S.A.) is an official student organization formed by students in the Urban Studies Program. Through U.S.A., students have been actively involved in issues related to the major throughout the Pittsburgh region. U.S.A. has invited guest speakers to appear on campus, organized field trips, and participated in numerous community projects.

University Honors College

The University Honors College (UHC) seeks to create opportunities for dedicated and engaged students to explore their interests in great depth and with great rigor. The UHC offers a variety of carefully designed courses from the humanities, social sciences, and natural sciences, along with supplemental advising opportunities, academic activities, and a distinctive baccalaureate degree in any undergraduate school of the University.

Contact Information

University of Pittsburgh
University Honors College
3600 Cathedral of Learning
Pittsburgh, PA 15260
412-624-6880
www.honorscollege.pitt.edu

Admission Requirements

A distinctive feature of the University Honors College (UHC) is that unlike honors programs and colleges at virtually all other universities, students do not apply for membership, students are not accepted into the UHC, and students are not rejected for membership. Rather, all undergraduate students who seek an enriched education are invited to pursue the rigorous academic opportunities provided by the UHC.

Advising

The UHC offers multiple forms of advising that are intended to complement the advising students receive from their primary advisor. These include supplemental academic advising, Health Professions Advising, national scholarships advising, community engagement advising, and Politics and Philosophy major advising.

Please note that all students are welcome to meet with UHC advisors and are encouraged to either make an appointment online or simply email the relevant advisor.

Supplemental Academic Advising

UHC supplemental academic advisors help students explore interests and goals, assist in matching them to relevant opportunities in research, student groups, and academics within the UHC and at Pitt; assist in planning double majors and/or an interdisciplinary approach to their education; provide general academic advice on courses, majors, and research; and aid in the preparation of personal statements for scholarships and graduate study. For more information: http://www.honorscollege.pitt.edu/advising

Health Professions Advising

Health professions advising assists students as they explore major choices, course selection, long range planning, and successful application to both the health professions committee and to medical, dental, optometry, podiatry, and veterinary schools. Advisors assess student goals and then recommend academic and experiential opportunities that mesh with student interests. For more information: http://www.honorscollege.pitt.edu/health-professions-advising

National Scholarships

The office of National Scholarships works closely with students to identify scholarships relevant to their academic and personal goals, and explore the steps to become competitive applicants for these awards. National scholarship advising can help students attain a broader perspective and refined understanding of their personal, academic, and professional goals; strengthen their writing skills through the creation and revision of personal statements and grant proposals; and develop the resourcefulness to identify opportunities to conduct meaningful research and/or incorporate service and international experiences into their educational plan. For more information: www.honorscollege.pitt.edu/national-scholarships-advising

Community Engagement

Community Engagement Advising and programming provides students with opportunities to use their academic interests and skills to positively impact their communities. Community Engagement Advising introduces students to pertinent social issues in the city of Pittsburgh as well as key organizations, leaders, and advocates who are involved with those issues; connects students to research, fellowships, experiential learning opportunities, and other scholarly projects that relate to public service and social change; supports students in designing independent experiences and research projects that integrate academic skills and interests with investigating and addressing community issues. For more information: http://www.honorscollege.pitt.edu/community-engagement-advising

Politics and Philosophy Major

This interdisciplinary major in the Kenneth P. Dietrich School of Arts and Sciences is advised through the UHC and provides students with training in the conceptual, empirical, and normative foundations of various fields of public policy. It enhances understanding of the moral and political complexities of public life and offers preparation in both theory and practice to students interested in pursuing careers in social and public affairs. For more information: http://www.honorscollege.pitt.edu/politics-philosophy

The Bachelor of Philosophy Degree

The Bachelor of Philosophy (BPhil) degree is jointly awarded by the UHC and any undergraduate school/college at Pitt. The BPhil degree signifies the highest level of research/scholarship attainable by an undergraduate student. To receive the BPhil degree, students must fulfill the degree requirements (major, general education, and/or other curricular requirements) of their "home school" (e.g., Kenneth P. Dietrich School of Arts and Sciences, Swanson School of Engineering, College of Business Administration, School of Nursing, etc.) and maintain a 3.50 cumulative GPA. The UHC adds two requirements: a more demanding program of study which should have breadth, depth, and focus and independent research/scholarship under the guidance of a faculty member culminating in a written thesis that is defended before a faculty examination committee that includes a visiting external examiner from another college or university. For more information: http://www.honorscollege.pitt.edu/bphil-degree

Special Academic Opportunities

Student Publications

The UHC advises and directs the publishing of four undergraduate publications: Collision (prose and poetry), Pittsburgh Undergraduate Review (analytical and scholarly essays), Three Rivers Review (literary magazine), Pitt Political Review (political writing). All publications are student run and always interested in new members. Consult the UHC publications page for more information: http://www.honorscollege.pitt.edu/activities/student-publications

Research Opportunities

The UHC provides research opportunities in the fall and spring semesters as well as the summer. These include the Brackenridge Research Fellowships, Health Sciences Summer Research Fellowships, and Chancellor's Undergraduate Research Fellowships just to name a few. For more in depth information about these programs and their application deadlines, please visit: http://www.honorscollege.pitt.edu/fall-and-spring-research-opportunities and http://www.honorscollege.pitt.edu/summer-research-opportunities

Housing

The UHC offers First-Year Honors Housing, located in Sutherland West, and Upper-Class Honors Housing in Pennsylvania Hall and Forbes Craig Apartments. Honors Housing is unique in that it connects highly motivated students from across schools and majors in communities that are shaped by their shared academic, cultural, and personal interests. To learn more about Honors Housing, visit: http://www.honorscollege.pitt.edu/housing

Major and Minor Descriptions

Major

Politics and Philosophy, BA

The politics and philosophy major, a major in the Kenneth P. Dietrich School of Arts and Sciences, advised through the University Honors College, provides students with interdisciplinary training in the conceptual, empirical, and normative foundations of various fields of public policy. It enhances students' understanding of the moral and political complexities of public life and it offers preparation in both theory and practice to students interested in pursuing careers in social and public affairs.

By combining course work from different disciplines -- political science, philosophy, and economics -- the program's scope is broad, yet the structure of the curriculum also requires depth. The thematic nature of the major allows for flexibility in course selection. In collaboration with the major advisor, students design a cohesive program of study tailored to meet their individual post-graduate/career interests and needs.

The politics and philosophy major is a rigorous, but rewarding, program. Upon graduation, an academic career is certainly a possible pursuit; the major also provides excellent preparation for careers in law, government, community organizations, and social action groups.

The major is comprised of elements from the political science, philosophy, and economics departments and involves a minimum of 51 credits distributed as follows: political science - 21 credits; philosophy - 21 credits; economics - 9 credits. A capstone, which may have associated credits, is also required.

Required Courses

Political Science Courses

Students must complete seven courses in political science. At least four of those courses must be upper level (numbered 1000 or above). One of the courses must be a W-course; the W-course may be either upper- or lower-level.

Philosophy Courses

Students must complete seven courses in philosophy. At least four of those courses must be upper level (numbered 1000 or above). One of the courses must be a W-course; the W-course may be either upper- or lower-level.

Co-Requisite Courses

Economics Courses

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- ECON XXXX any course (no course in the 0800 series may count toward this requirement)

Capstone Requirement

In consultation with the major advisor, students may complete one of the following requirements to graduate with honors in the major.

- complete the Bachelor of Philosophy thesis through the University Honors College (UHC);
- participate in a graduate-level seminar (with permission from the instructor); or
- complete a Directed Research Project, an Independent Study, or an Internship.

Other requirements and conditions

Grade requirements

A minimum GPA of 2.0 is required in those courses that count toward the major.

Satisfactory/No Credit grade option

There is no limit on the number of courses in the major that can be taken on an S/NC basis, but it is suggested that these courses be taken for a letter grade.

Writing (W) requirement

The W courses listed under the political science and philosophy requirements satisfy the W requirement for the major.

Joint Major

University Honors Joint Degree Program

Completion of the UHC program would require 24 academic credits to be completed upon graduation. Of these 24 credits, a minimum of 18 academic credits of UHC approved honors courses that would include courses within approved school-based honors programs are required. A required minimum of 6 experiential credits that include academic research, independent study, approved study abroad via Pitt Panther programs, approved internship for credit, or approved Coop Program for academic credit. Approved experiential courses as part of approved school-based honors programs would also qualify. In addition to the curricular requirements, students would be required to complete the honors-specific Outside of the Classroom Curriculum that includes enhanced experiences for honors students that are not for academic credits. Minimum GPA of 3.25 is required for completed of the honors program upon graduation. Upon completion, students will receive their degree issued jointly from their academic unit and the honors college with "Honors" designated on the diploma. Students admitted to the honors college for the freshman year will be granted priority access to the honors living learning community with the residence hall. Honors students in good academic standing within the program will also be granted priority registration throughout their time as undergraduate students.

Admissions Requirements

The admissions process includes criteria for three categories of students: freshman admits, internal (Pitt) transfers and external transfers.

1. The criteria for freshman admissions include: evaluation of two well-thought-out and creatively written essays; evaluation of extra-curricular activities;

2. The criteria for external transfer admissions include: University admissions, completion of a minimum of two college semesters (24 credits) that meet the University of Pittsburgh criteria for transfer to credits, completion of intellectual curiosity and public good essay questions;
3. The criteria for internal transfer (current Pitt students in all campuses) admissions include: Current Pitt transcript with minimum GPA of 3.50, completion of two semesters (24 credits), evaluation of intellectual curiosity and public good essay questions and one academic letter of recommendation from an instructor or academic advisor.

Total Credits: 24

Dietrich School of Arts and Sciences Faculty

Last Name	First Name	Rank	Department	Highest Degree	Conferring Institution
Brooks	Robin	Assistant Professor	Africana Studies	PhD	Florida, University of
Covington	Yolanda	Associate Professor	Africana Studies	PhD	Michigan, Ann Arbor, University of
Germain	Felix	Assistant Professor	Africana Studies	PhD	California, Berkeley, University of
Reid	Michele	Assistant Professor	Africana Studies	PhD	Texas, Austin, University of
Sharif	Oronde	Lecturer	Africana Studies	MSW	Pittsburgh, Main, University of
Taylor	Jerome	Associate Professor	Africana Studies	PhD	Indiana State University, Main
Temple	Christel	Associate Professor	Africana Studies	PhD	Temple University
Tillotson	Michael	Assistant Professor	Africana Studies	PhD	Temple University
Alter	Joseph	Professor	Anthropology	PhD	California, Berkeley, University of
Arkush	Elizabeth	Associate Professor	Anthropology	PhD	California, Los Angeles, University of
Barton	Loukas	Assistant Professor	Anthropology	PhD	California, Davis, University of
Bermann	Marc	Associate Professor	Anthropology	PhD	Michigan, Ann Arbor, University of
Brown	Laura	Assistant Professor	Anthropology	PhD	Michigan, Ann Arbor, University of

Cabot	Heath	Assistant Professor	Anthropology	PhD	California, Santa Cruz, University of
Constable	Nicole	Professor	Anthropology	PhD	California, Berkeley, University of
de Montmollin	Olivier	Associate Professor	Anthropology	PhD	Michigan, Ann Arbor, University of
Drennan	Robert	Distinguished Professor	Anthropology	PhD	Michigan, Ann Arbor, University of
Hanks	Bryan	Associate Professor	Anthropology	PhD	Cambridge, University of
Hayden	Robert	Professor	Anthropology	PhD	State University of New York, Buffalo
Judd	Margaret	Associate Professor	Anthropology	PhD	University of Alberta
Lukacs	Gabriella	Associate Professor	Anthropology	PhD	Duke University
Matza	Tomas	Assistant Professor	Anthropology	PhD	Stanford University
Musante	Kathleen	Professor	Anthropology	PhD	Connecticut, Main, University of
Schwartz	Jeffrey	Professor	Anthropology	PhD	Columbia University, Main Division
Siegel	Michael	Professor	Anthropology	PhD	City University of New York, Graduate Center
Strathern	Andrew	Andrew Mellon Professor	Anthropology	PhD	Cambridge, University of
Wanderer	Emily	Assistant Professor	Anthropology	PhD	Massachusetts Institute of Technology
Arndt	Karen	Professor	Biological Sciences	PhD	California, Berkeley, University of
Ashman	Tia-Lynn	Distinguished Professor	Biological Sciences	PhD	California, Davis, University of
Ashmore	Lesley	Lecturer	Biological Sciences	PhD	Pennsylvania, University of
Baker	Natasha	Lecturer	Biological Sciences	PhD	University of East Anglia
Berman	Andrea	Assistant Professor	Biological Sciences	PhD	Yale University

Beucher	Margaret	Lecturer	Biological Sciences	PhD	North Carolina, Chapel Hill, University of
Bledsoe	Anthony	Lecturer	Biological Sciences	PhD	Yale University
Boyle	Jon	Associate Professor	Biological Sciences	PhD	Wisconsin, Madison, University of
Brodsky	Jeffrey	Professor/(Avinoff Professor)	Biological Sciences	PhD	Harvard University
Campbell	Gerard	Associate Professor	Biological Sciences	PhD	Leicester, University of
Carlson Rosenbaum	Anne	Assistant Professor	Biological Sciences	PhD	Washington, University of
Carson	Walter	Associate Professor	Biological Sciences	PhD	Cornell University Endowed Colleges
Chapman	Deborah	Associate Professor	Biological Sciences	PhD	Columbia University, Main Division
Czapski	Tiffaney	Lecturer	Biological Sciences	PhD	Duquesne University
Damiani	Candice	Lecturer	Biological Sciences	PhD	West Virginia University
Daniels	Lydia	Lecturer	Biological Sciences	PhD	Pittsburgh, Main, University of
Donovan	Samuel	Lecturer	Biological Sciences	PhD	Wisconsin, Madison, University of
Durrant	Jacob	Assistant Professor	Biological Sciences	PhD	California, San Diego, University of
Gardner	Kathryn	Lecturer	Biological Sciences	PhD	North Carolina, Chapel Hill, University of
Gharaibeh	Burhan	Lecturer II	Biological Sciences	PhD	Texas Tech University
Grabowski	Paula	Professor/(Assoc Invest Howard Hughes)	Biological Sciences	PhD	Colorado, Boulder, University of
Gribble	Suzanna	Lecturer II	Biological Sciences	PhD	Utah, University of
Hatfull	Graham	Professor/(Eberly Family Prof)	Biological Sciences	PhD	Edinburgh, University of
Hendrix	Roger	Distinguished Professor	Biological Sciences	PhD	Harvard University
Hildebrand	Jeffrey	Associate Professor	Biological Sciences	PhD	Virginia, University of

Jacobson	Lewis	Professor	Biological Sciences	PhD	Illinois, Urbana, University of
Kelsey	Ellen	Lecturer	Biological Sciences	MS	Rochester, University of
Kiselyov	Kirill	Associate Professor	Biological Sciences	PhD	Russian Academy of Science, Moscow
Kitzes	Justin	Assistant Professor	Biological Sciences	PhD	California, Berkeley, University of
Kohl	Kevin	Assistant Professor	Biological Sciences	PhD	Utah, University of
Lawrence	Jeffrey	Professor	Biological Sciences	PhD	Washington University
Lee	Miler	Assistant Professor	Biological Sciences	PhD	Pennsylvania, University of
Legg	Alison	Senior Lecturer	Biological Sciences	PhD	Pittsburgh, Main, University of
McGreevy	Erica	Lecturer	Biological Sciences	PhD	Pittsburgh, Main, University of
Oke	Valerie	Senior Lecturer	Biological Sciences	PhD	Harvard University
Payne	Kimberly	Lecturer	Biological Sciences	PhD	Pittsburgh, Main, University of
Peebles	Craig	Professor	Biological Sciences	PhD	Chicago, University of
Pipas	James	Professor and Herbert W. and Grace Boyer Chair	Biological Sciences	PhD	Florida State University
Polinko	Eric	Lecturer	Biological Sciences	PhD	Indiana University Bloomington
Rebeiz	Mark	Associate Professor	Biological Sciences	PhD	California, San Diego, University of
Roberts	Laurel	Senior Lecturer	Biological Sciences	PhD	Pittsburgh, Main, University of
Rosenberg	John	Professor	Biological Sciences	PhD	Massachusetts Institute of Technology
Saunders	William	Associate Professor	Biological Sciences	PhD	Johns Hopkins University
Schmidt	Jean	Lecturer	Biological Sciences	MS	Duquesne University

Schwacha	Anthony	Associate Professor	Biological Sciences	PhD	Harvard University
Swigonova	Zuzana	Lecturer II	Biological Sciences	PhD	Rutgers University, New Brunswick
Turcotte	Martin	Assistant Professor	Biological Sciences	PhD	California, Riverside, University of
Van Demark	Andrew	Associate Professor	Biological Sciences	PhD	Johns Hopkins University
Zapanta	Laura	Lecturer II	Biological Sciences	PhD	Pennsylvania State University, Main
Zawacki	Corinne	Associate Professor	Biological Sciences	PhD	Michigan, Ann Arbor, University of
Amemiya	Shigeru	Professor	Chemistry	PhD	Tokyo, University of
Asher	Sanford	Distinguished Professor	Chemistry	PhD	California, Berkeley, University of
Bandik	George	Senior Lecturer	Chemistry	PhD	Pittsburgh, Main, University of
Brummond	Kay	Professor	Chemistry	PhD	Harvard University
Childers	William	Assistant Professor	Chemistry	PhD	Emory University
Chong	Lillian	Associate Professor	Chemistry	PhD	California, San Francisco, University of
Coalson	Rob	Professor	Chemistry	PhD	Harvard University
Cooper	N. John	Professor	Chemistry	DPhil	Oxford, University of
Curran	Dennis	Distinguished Service Professor/(Bayer Prof)	Chemistry	PhD	Rochester, University of
Deiters	Alexander	Professor	Chemistry	PhD	Munster, University of
Floreancig	Paul	Professor	Chemistry	PhD	Stanford University
Fortney	Carol	Lecturer	Chemistry	PhD	Pittsburgh, Main, University of
Garrett-Roe	Sean	Assistant Professor	Chemistry	PhD	California, Berkeley, University of

Grabowski	Joseph	Associate Professor	Chemistry	PhD	Colorado, Boulder, University of
Horne	William	Associate Professor	Chemistry	PhD	Scripps Research Institute
Huston	Ericka	Senior Lecturer	Chemistry	PhD	Maryland, College Park, University of
Hutchison	Geoffrey	Associate Professor	Chemistry	PhD	Northwestern University
Islam	Kabirul	Assistant Professor	Chemistry	PhD	Indian Institute of Science, India
Jordan	Kenneth	Distinguished Professor and Richard King Mellon Professor	Chemistry	PhD	Massachusetts Institute of Technology
Koide	Kazunori	Associate Professor	Chemistry	PhD	California, San Diego, University of
Laaser	Jennifer	Assistant Professor	Chemistry	PhD	Wisconsin, Madison, University of
Lambrecht	Daniel	Assistant Professor	Chemistry	PhD	Tubingen, University of
Liu	Haitao	Associate Professor	Chemistry	PhD	California, Berkeley, University of
Liu	Peng	Assistant Professor	Chemistry	PhD	California State University, Los Angeles
Liu	Xinyu	Assistant Professor	Chemistry	PhD	Swiss Federal Institute of Technology
Maleckar	Susan	Lecturer	Chemistry	PhD	Pittsburgh, Main, University of
Meyer	Tara	Associate Professor	Chemistry	PhD	Iowa, University of
Michael	Adrian	Professor	Chemistry	PhD	Emory University
Millstone	Jill	Associate Professor	Chemistry	PhD	Northwestern University
Morris	Hannah	Lecturer	Chemistry	PhD	Pittsburgh, Main, University of
Nelson	Scott	Professor	Chemistry	PhD	Rochester, University of
Rosi	Nathaniel	Professor	Chemistry	PhD	Michigan, Ann Arbor, University of

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Star	Alexander	Professor	Chemistry	PhD	Tel Aviv University
Wagner II	Eugene	Senior Lecturer	Chemistry	PhD	North Georgia, University of
Waldeck	David	Professor	Chemistry	PhD	Chicago, University of
Wang	Yiming	Assistant Professor	Chemistry	PhD	California, Berkeley, University of
Ward	Michelle	Lecturer II	Chemistry	PhD	Pittsburgh, Main, University of
Weber	Stephen	Professor	Chemistry	PhD	McGill University
Wilcox	Craig	Professor	Chemistry	PhD	California Institute of Technology
Wipf	Peter	Distinguished University Professor	Chemistry	PhD	Zurich, University of
Bromberg	Jacques	Assistant Professor	Classics	PhD	Pennsylvania, University of
Hoenig	Christina	Assistant Professor	Classics	PhD	Cambridge, University of
Jones	Nicholas	Professor	Classics	PhD	California, Berkeley, University of
Possanza	D. Mark	Associate Professor	Classics	PhD	North Carolina, Chapel Hill, University of
Bannon	Michael	Lecturer II	Communication	PhD	Pittsburgh, Main, University of
Bruce	Caitlin	Assistant Professor	Communication	PhD	Northwestern University
Clarke	Lynn	Lecturer	Communication	PhD	Northwestern University
Daniel	Jack	Distinguished Service Professor	Communication	PhD	Pittsburgh, Main, University of
English	Eric	Lecturer	Communication	PhD	Pittsburgh, Main, University of
Gareis	John	Senior Lecturer	Communication	PhD	Pittsburgh, Main, University of

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Johnson	Paul	Assistant Professor	Communication	PhD	Iowa, University of
Kuchinskaya	Olga	Associate Professor	Communication	PhD	California, San Diego, University of
Lyne	John	Professor	Communication	PhD	Wisconsin, Madison, University of
Malin	Brenton	Associate Professor	Communication	PhD	Iowa, University of
Marshall	David	Assistant Professor	Communication	PhD	Johns Hopkins University
Matheson	Calum	Assistant Professor	Communication	PhD	North Carolina, Chapel Hill, University of
Mitchell	Gordon	Associate Professor	Communication	PhD	Northwestern University
Olson	Lester	Professor	Communication	PhD	Wisconsin, Madison, University of
Poulakos	John	Associate Professor	Communication	PhD	Kansas, Main, University of
Zboray	Ronald	Professor	Communication	PhD	New York University
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Nara	Hiroshi	Professor	East Asian Languages and Literatures	PhD	Kansas, Main, University of
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Gihleb	Rania	Assistant Professor	Economics	PhD	Boston University
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Hanley	Douglas	Assistant Professor	Economics	PhD	Pennsylvania, University of
Hewitt	David	Lecturer	Economics	PhD	California, Irvine, University of
Huffman	David	Professor	Economics	PhD	California, Berkeley, University of
Hur	Sewon	Assistant Professor	Economics	PhD	Minnesota, Twin Cities, University of
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Troesken Jr	Werner	Professor	Economics	PhD	Washington University
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Bove	Carol	Senior Lecturer	English	PhD	State University of New York, Binghamton
Bove	Paul	Distinguished Professor	English	PhD	State University of New York, Binghamton
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Carr	Stephen	Associate Professor	English	PhD	Michigan, Ann Arbor, University of
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Emanuel	Lynn	Professor	English	MFA	Iowa, University of
Farkas	Angela	Lecturer	English	PhD	Pittsburgh, Main, University of
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Laskas	Jeanne	Professor	English	MFA	Pittsburgh, Main, University of
Leavens	Sarah	Lecturer	English	MFA	Mansfield State College
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Lychack	William	Assistant Professor	English	MFA	Michigan, Ann Arbor, University of
Maccabe	Colin	Distinguished Professor	English	PhD	Cambridge, University of
Majumdar	Neepa	Associate Professor	English	PhD	Indiana University Bloomington
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Matway	Elizabeth	Senior Lecturer	English	PhD	Pittsburgh, Main, University of
McDermott	Ryan	Associate Professor	English	PhD	Virginia, Main, University of
McMillan	Daniel	Lecturer	English	MFA	Pittsburgh, Main, University of
McWhorter	Thomas	Lecturer	English	MFA	Utah, University of

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Oaks	Jeffrey	Senior Lecturer	English	MFA	Pittsburgh, Main, University of
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Och	Dana	Lecturer II	English	PhD	Pittsburgh, Main, University of
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Pitts	Elizabeth	Assistant Professor	English	PhD	Norh Carolina State University
Puri	Shalini	Professor	English	PhD	Ithaca College
Reyn	Irina	Associate Professor	English	MFA	Bennington College
Rogers	Gayle	Associate Professor	English	PhD	Northwestern University
Sachdeva	Anjali	Lecturer	English	MFA	Iowa, University of
Salzer	Kenneth	Lecturer	English	PhD	Rochester, University of
Satyavolu	Uma	Lecturer II	English	PhD	West Virginia University
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Vee	Annette	Assistant Professor	English	PhD	Wisconsin, Madison, University of
Waldron	Jennifer	Associate Professor	English	PhD	Princeton University
Weikle-Mills	Courtney	Associate Professor	English	PhD	Ohio State University Main
West	Michael	Professor	English	PhD	Harvard University
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Joshi	Sarah	Lecturer	Film Studies	PhD	London, University of
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Hogg	Chloe	Assistant Professor	French and Italian Languages and Literatures	PhD	Pennsylvania, University of
Insana	Lina	Associate Professor	French and Italian Languages and Literatures	PhD	Pennsylvania, University of
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Mecchia	Giuseppina	Associate Professor	French and Italian Languages and Literatures	PhD	Princeton University
Pettersen	David	Associate Professor	French and Italian Languages and Literatures	PhD	California, Berkeley, University of
Reeser	Todd	Professor	French and Italian Languages and Literatures	PhD	Michigan, Ann Arbor, University of
Savoia	Francesca	Professor	French and Italian Languages and Literatures	PhD	California, Los Angeles, University of
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Elliott	Emily	Associate Professor	Geology and Environmental Science	PhD	Johns Hopkins University
Harbert	William	Professor	Geology and Environmental Science	PhD	Stanford University
Jones	Charles	Senior Lecturer	Geology and Environmental Science	PhD	Oxford, University of
McQuarrie	Nadine	Associate Professor	Geology and Environmental Science	PhD	Arizona, University of
Ramsey	Michael	Professor	Geology and Environmental Science	PhD	Arizona State University
Shelef	Eitan	Assistant Professor	Geology and Environmental Science	PhD	Stanford University
Stewart	Brian	Associate Professor	Geology and Environmental Science	PhD	California, Los Angeles, University of
Thomas	Brian	Assistant Professor	Geology and Environmental Science	PhD	Tufts University
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Harms	Viktoria	Lecturer	German	PhD	Pittsburgh, Main, University of
Kurash	Jaclyn	Lecturer	German	PhD	Ohio State University, Main
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Garcia	Armando	Assistant Professor	Hispanic Languages and Literatures	PhD	Cornell University
Kim	Junyoung	Assistant Professor	Hispanic Languages and Literatures	PhD	Cornell University Statutory Colleges
Lamana	Gonzalo	Associate Professor	Hispanic Languages and Literatures	PhD	Duke University

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Carson	Carolyn	Senior Lecturer	History	PhD	Carnegie-Mellon University
Chase	William	Professor	History	PhD	Boston College
Frykman	Niklas	Assistant Professor	History	PhD	Pittsburgh, Main, University of
Glasco	Laurence	Associate Professor	History	PhD	State University of New York, Buffalo
Gobat	Michel	Associate Professor	History	PhD	Chicago, University of
Gotkowitz	Laura	Associate Professor	History	PhD	Chicago, University of
Greenberg	Janelle	Professor	History	PhD	Michigan, Ann Arbor, University of
Greenwald	Maurine	Associate Professor	History	PhD	Brown University
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Hammond	Leslie	Senior Lecturer	History	PhD	Pittsburgh, Main, University of
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Mostern	Ruth	Associate Professor	History	PhD	California, Berkeley, University of
Novosel	Anthony	Senior Lecturer	History	PhD	Pittsburgh, Main, University of
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Tsoukas	Liann	Senior Lecturer	History	PhD	Indiana University Bloomington
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Norton	John	Distinguished Professor	History and Philosophy of Science	PhD	New South Wales, University of
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Peters	Erin	Lecturer	History of Art and Architecture	PhD	Iowa, University of
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Taylor	Alexander	Assistant Professor	History of Art and Architecture	PhD	Oxford, University of
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Kanwit	Matthew	Assistant Professor	Linguistics	PhD	Indiana University Bloomington
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Hajlasz	Piotr	Professor	Mathematics	PhD	Warsaw, University of
Hales	Thomas	Andrew Mellon Professor	Mathematics	PhD	Princeton University
Hockensmith	Daniel	Lecturer	Mathematics	PhD	Illinois, Urbana, University of
Ion	Bogdan	Associate Professor	Mathematics	PhD	Princeton University
Jiang	Huiqiang	Associate Professor	Mathematics	PhD	New York University
Kaveh	Kiumars	Associate Professor	Mathematics	PhD	Toronto, University of
Layton	William	Professor	Mathematics	PhD	Tennessee, Knoxville, University of
Lennard	Christopher	Associate Professor	Mathematics	PhD	Kent State University, Main
Lewicka	Marta	Associate Professor	Mathematics	PhD	Scuola Internazional Superiore di Studi Avanzati
Manfredi	Juan	Professor	Mathematics	PhD	Washington University
Morgan	Jeremiah	Lecturer	Mathematics	PhD	Pittsburgh, Main, University of
Neilan	Michael	Associate Professor	Mathematics	PhD	Tennessee, Knoxville, University of
Pakzad	Mohammadreza	Associate Professor	Mathematics	PhD	École normale supérieure de Cachan
Pan	Yibiao	Professor	Mathematics	PhD	Princeton University
Rabier	Patrick	Professor	Mathematics	PhD	Paris VI-Curie, University of
Rubin	Jonathan	Professor	Mathematics	PhD	Brown University
Sati	Hisham	Assistant Professor	Mathematics	PhD	Michigan, Ann Arbor, University of
Schikorra	Armin	Assistant Professor	Mathematics	PhD	RWTH Aachen University
Sparling	George	Associate Professor	Mathematics	PhD	London, University of

Swigon	David	Associate Professor	Mathematics	PhD	Rutgers University, New Brunswick
Sysoeva	Inna	Lecturer II	Mathematics	PhD	Pennsylvania State University, Main
Trenchea	Catalin	Associate Professor	Mathematics	PhD	Iasi University
Trofimov	Evgueni	Lecturer II	Mathematics	PhD	Pittsburgh, Main, University of
Vainchtein	Anna	Professor	Mathematics	PhD	Cornell University Statutory Colleges
Wang	Dehua	Professor	Mathematics	PhD	Chicago, University of
Wang	Linhong	Lecturer	Mathematics	PhD	Temple University
Wheeler	Jeffrey	Lecturer II	Mathematics	PhD	Memphis State University
Xiong	Sheng	Lecturer	Mathematics	PhD	Temple University
Xu	Hao	Assistant Professor	Mathematics	PhD	Zhejiang University, School of Medicine
Yao	Song	Assistant Professor	Mathematics	PhD	Purdue University, Main
Yotov	Ivan	Professor	Mathematics	PhD	Rice University
Allen	Geri	Associate Professor	Music	MA	Pittsburgh, Main, University of
Ayyagari	Shalini	Assistant Professor	Music	PhD	California, Berkeley, University of
Bloechl	Olivia	Professor	Music	PhD	Pennsylvania, University of
Helbig	Adriana	Associate Professor	Music	PhD	Columbia University, Main Division
Heller	Michael	Assistant Professor	Music	PhD	Harvard University
Johnson	Aaron	Assistant Professor	Music	PhD	Columbia University, Main Division
Moe	Eric	Andrew Mellon Professor	Music	PhD	California, Berkeley, University of
Pierson	Marcelle	Lecturer	Music	PhD	Chicago, University of

Rice	Susan	Senior Lecturer	Music	DMA	Illinois, Urbana, University of
Root	Deane	Professor	Music	PhD	Illinois, Urbana, University of
Rosenblum	Mathew	Professor	Music	PhD	Princeton University
Weintraub	Andrew	Professor	Music	PhD	California, Berkeley, University of
Williams	Amy	Associate Professor	Music	PhD	State University of New York, Buffalo
Zahab	Roger	Senior Lecturer	Music	MM	State University of New York, Stony Brook
Artim	Debra	Lecturer	Neuroscience	PhD	Pittsburgh, Main, University of
Barrionuevo	German	Professor	Neuroscience	MD	Buenos Aires, Universidad de
Cohen	Marlene	Associate Professor	Neuroscience	PhD	Stanford University
Colby	Carol	Professor	Neuroscience	PhD	Massachusetts Institute of Technology
Dong	Yan	Professor	Neuroscience	PhD	Chicago, University of
Fanselow	Erika	Lecturer	Neuroscience	PhD	Duke University
Grace	Anthony	Distinguished Professor	Neuroscience	PhD	Yale University
Johnson	Jon	Professor	Neuroscience	PhD	Stanford University
Meriney	Stephen	Professor	Neuroscience	PhD	Connecticut, Main, University of
Oswald	Anne Marie	Assistant Professor	Neuroscience	PhD	Ottawa, University of
Runyan	Caroline	Assistant Professor	Neuroscience	PhD	Massachusetts Institute of Technology
Schluter	Oliver	Assistant Professor	Neuroscience	MD	Hannover, University of
Sesack	Susan	Professor	Neuroscience	PhD	Eastern Connecticut State University

Stricker	Edward	Distinguished University Professor	Neuroscience	PhD	Yale University
Sved	Alan	Professor	Neuroscience	PhD	Massachusetts Institute of Technology
Batterman	Robert	Professor	Philosophy	PhD	Michigan, Ann Arbor, University of
Berry	Thomas	Senior Lecturer	Philosophy	PhD	Pittsburgh, Main, University of
Brandom	Robert	Distinguished Professor	Philosophy	PhD	Princeton University
Caie	Michael	Associate Professor	Philosophy	PhD	California, Berkeley, University of
Engstrom	Stephen	Professor	Philosophy	PhD	Chicago, University of
Gallow	Jeffrey	Assistant Professor	Philosophy	PhD	Michigan, Ann Arbor, University of
Gelber	Jessica	Assistant Professor	Philosophy	PhD	California, Berkeley, University of
Gupta	Anil	Distinguished Professor and Alan Ross Anderson Chair	Philosophy	PhD	Pittsburgh, Main, University of
Lewinsohn	Joseph	Assistant Professor	Philosophy	PhD	New York University
Manders	Kenneth	Associate Professor	Philosophy	PhD	California, Berkeley, University of
McDowell	John	Distinguished University Professor	Philosophy	MA	Oxford, University of
Pallikkathayil	Japa	Assistant Professor	Philosophy	PhD	Harvard University
Rescher	Nicholas	Distinguished University Professor	Philosophy	PhD	Princeton University
Ricketts	Thomas	Professor	Philosophy	PhD	Michigan, Ann Arbor, University of
Shaw	James	Associate Professor	Philosophy	PhD	Harvard University
Shumener	Erica	Assistant Professor	Philosophy	PhD	New York University

Thompson	Michael	Professor	Philosophy	PhD	California, Los Angeles, University of
Valente	Giovanni	Assistant Professor	Philosophy	PhD	Maryland, College Park, University of
Whiting	Jennifer	Distinguished Professor	Philosophy	PhD	Cornell University Endowed Colleges
Wilson	Mark	Distinguished Professor	Philosophy	PhD	Harvard University
Badenes	Carlos	Assistant Professor	Physics and Astronomy	PhD	Universidad Politécnica de Puerto Rico
Batell	Brian	Assistant Professor	Physics and Astronomy	PhD	Minnesota, Twin Cities, University of
Bezanson	Rachel	Assistant Professor	Physics and Astronomy	PhD	Yale University
Boudreau	Joseph	Professor	Physics and Astronomy	PhD	Wisconsin, Madison, University of
Boyanovsky	Daniel	Professor	Physics and Astronomy	PhD	California, Santa Barbara, University of
Broccio	Matteo	Lecturer	Physics and Astronomy	PhD	Messina, University of
Clark	Russell	Senior Lecturer	Physics and Astronomy	PhD	Louisiana State University in Shreveport
Devaty	Robert	Associate Professor	Physics and Astronomy	PhD	Cornell University
Dutt	Gurudev	Associate Professor	Physics and Astronomy	PhD	Michigan, Ann Arbor, University of
Dytman	Steven	Professor	Physics and Astronomy	PhD	Carnegie-Mellon University
Freitas	Ayres	Associate Professor	Physics and Astronomy	PhD	Hamburg, University of
Frolov	Sergey	Assistant Professor	Physics and Astronomy	PhD	Illinois, Urbana, University of
Han	Tao	Distinguished Professor	Physics and Astronomy	PhD	Wisconsin, Madison, University of
Hatridge	Michael	Assistant Professor	Physics and Astronomy	PhD	California, Berkeley, University of

Hillier	Desmond	Professor	Physics and Astronomy	PhD	Australian National University
Hong	Tae Min	Assistant Professor	Physics and Astronomy	PhD	California, Santa Barbara, University of
Kosowsky	Arthur	Professor	Physics and Astronomy	PhD	Chicago, University of
Leibovich	Adam	Professor	Physics and Astronomy	PhD	California Institute of Technology
Levy	Jeremy	Distinguished Professor	Physics and Astronomy	PhD	California, Santa Barbara, University of
Liu	Wensheng	Professor	Physics and Astronomy	PhD	Texas, Austin, University of
Mong	Roger	Assistant Professor	Physics and Astronomy	PhD	California, Berkeley, University of
Mueller	James	Associate Professor	Physics and Astronomy	PhD	Cornell University Endowed Colleges
Naples	Donna	Professor	Physics and Astronomy	PhD	Maryland, University of
Nero	David	Lecturer	Physics and Astronomy	PhD	Toledo, University of
Newman	Jeffrey	Professor	Physics and Astronomy	PhD	California, Berkeley, University of
Paolone	Vittorio	Professor	Physics and Astronomy	PhD	California, Davis, University of
Pekker	David	Assistant Professor	Physics and Astronomy	PhD	Illinois, Urbana, University of
Petek	Hrvoje	Richard King Mellon Professor	Physics and Astronomy	PhD	California, Berkeley, University of
Roskies	Ralph	Professor	Physics and Astronomy	PhD	Princeton University
Salman	Hanna	Associate Professor	Physics and Astronomy	PhD	Hebrew University of Jerusalem
Savinov	Vladimir	Professor	Physics and Astronomy	PhD	Minnesota, Twin Cities, University of
Singh	Chandralekha	Professor	Physics and Astronomy	PhD	California, Santa Barbara, University of

Snoke	David	Professor	Physics and Astronomy	PhD	Illinois, Urbana, University of
Swanson	Eric	Professor	Physics and Astronomy	PhD	Toronto, University of
Turnshek	David	Professor	Physics and Astronomy	PhD	Arizona, University of
Wood-Vasey	William	Associate Professor	Physics and Astronomy	PhD	California, Berkeley, University of
Wu	Xiao-Lun	Professor	Physics and Astronomy	PhD	Cornell University Endowed Colleges
Zentner	Andrew	Associate Professor	Physics and Astronomy	PhD	Ohio State University Main
Aklin	Michael	Assistant Professor	Political Science	PhD	New York University
Ames	Barry	Andrew Mellon Professor	Political Science	PhD	Stanford University
Bonneau	Christopher	Associate Professor	Political Science	PhD	Michigan State University
Colaresi	Michael	Professor and Dietrich Chair	Political Science	PhD	Indiana University Bloomington
Ding	Yue	Assistant Professor	Political Science	PhD	Harvard University
Finkel	Steven	Professor and Daniel Wallace Chair	Political Science	PhD	State University of New York, Stony Brook
Gochman	Charles	Associate Professor	Political Science	PhD	Michigan, Ann Arbor, University of
Goodhart	Michael	Associate Professor	Political Science	PhD	California, Los Angeles, University of
Hays	Jude	Associate Professor	Political Science	PhD	Minnesota, Twin Cities, University of
Kanthak	Kristin	Associate Professor	Political Science	PhD	Iowa, University of
Linden	Ronald	Professor	Political Science	PhD	Princeton University
Long	Meridith	Lecturer	Political Science	PhD	Vanderbilt University
Lotz	Andrew	Lecturer II	Political Science	PhD	Pittsburgh, Main, University of
MacKenzie	Michael	Assistant Professor	Political Science	PhD	British Columbia, University of

Morgenstern	Scott	Associate Professor	Political Science	PhD	San Diego, University of
Paler	Laura	Assistant Professor	Political Science	PhD	Columbia University, Main Division
Panayides	Daniela	Associate Professor	Political Science	PhD	Yale University
Perez-Linan	Anibal	Professor	Political Science	PhD	Notre Dame, University of
Peters	B. Guy	M Falk Professor	Political Science	PhD	Michigan State University
Savun	Burcu	Associate Professor	Political Science	PhD	Rice University
Sbragia	Alberta	Professor	Political Science	PhD	Wisconsin, Madison, University of
Shineman	Victoria	Assistant Professor	Political Science	PhD	New York University
Spaniel	William	Assistant Professor	Political Science	PhD	Rochester, University of
Spoon	Jae-Jae	Associate Professor	Political Science	PhD	Michigan, Ann Arbor, University of
West	Emily	Assistant Professor	Political Science	PhD	New York University
Woon	Jonathan	Associate Professor	Political Science	PhD	Stanford University
Binning	Kevin	Assistant Professor	Psychology	PhD	California, Los Angeles, University of
Brownell	Celia	Professor	Psychology	PhD	Minnesota, Duluth, University of
Choukas-Bradley	Sophia	Assistant Professor	Psychology	PhD	North Carolina, Chapel Hill, University of
Ciccocioppo	Melinda	Lecturer	Psychology	PhD	Pittsburgh, Main, University of
Cohn	Jeffrey	Professor	Psychology	PhD	Maryland, College Park, University of
Cousins	Jennifer	Lecturer	Psychology	PhD	Arizona, University of
Coutanche	Marc	Assistant Professor	Psychology	PhD	Pennsylvania, University of
Donny	Eric	Professor	Psychology	PhD	Pittsburgh, Main, University of

Erickson	Kirk	Associate Professor	Psychology	PhD	Illinois, Urbana, University of
Fiez	Julie	Professor	Psychology	PhD	Washington University
Forest	Amanda	Assistant Professor	Psychology	PhD	Waterloo, University of
Fraundorf	Scott	Assistant Professor	Psychology	PhD	Illinois, Urbana, University of
Ganger	Jennifer	Lecturer	Psychology	PhD	Massachusetts Institute of Technology
Gianaros	Peter	Professor	Psychology	PhD	Pennsylvania State University, Main
Hanson	Jamie	Assistant Professor	Psychology	PhD	Wisconsin, Madison, University of
Inagaki	Tristen	Assistant Professor	Psychology	PhD	California, Los Angeles, University of
Iverson	Jana	Professor	Psychology	PhD	Chicago, University of
Kamarck	Thomas	Professor	Psychology	PhD	Oregon, Main, University of
Kucinski	Barbara	Lecturer II	Psychology	PhD	Pittsburgh, Main, University of
Lausberg	Cynthia	Senior Lecturer	Psychology	PhD	Pittsburgh, Main, University of
Levine	John	Professor	Psychology	PhD	Wisconsin, Madison, University of
Libertus	Melissa	Assistant Professor	Psychology	PhD	Duke University
Manuck	Stephen	Distinguished University Professor	Psychology	PhD	Vanderbilt University
Marsland	Anna	Professor	Psychology	PhD	Pittsburgh, Main, University of
McCall	Robert	Professor	Psychology	PhD	Illinois, Urbana, University of
Nokes-Malach	Timothy	Associate Professor	Psychology	PhD	Illinois, Chicago Circle, University of

Orehek	Edward	Assistant Professor	Psychology	PhD	Maryland, College Park, University of
Perfetti	Charles	Distinguished University Professor	Psychology	PhD	Michigan, Ann Arbor, University of
Pogue-Geile	Michael	Professor	Psychology	PhD	Indiana University Bloomington
Resnick	Lauren	Distinguished University Professor	Psychology	EdD	Harvard University
Roecklein	Kathryn	Associate Professor	Psychology	PhD	Uniformed Services University of the Health Sciences
Rottman	Benjamin	Assistant Professor	Psychology	PhD	Yale University
Sayette	Michael	Professor	Psychology	PhD	Rutgers University, New Brunswick
Schneider	Walter	Professor	Psychology	PhD	Indiana University South Bend
Schumann	Karina	Assistant Professor	Psychology	PhD	Waterloo, University of
Schunn	Christian	Professor	Psychology	PhD	Carnegie-Mellon University
Shaw	Daniel	Distinguished Professor	Psychology	PhD	Virginia, Main, University of
Silk	Jennifer	Associate Professor	Psychology	PhD	Temple University
Strauss	Mark	Associate Professor	Psychology	PhD	Illinois, Urbana, University of
Streeter	Sybil	Lecturer	Psychology	PhD	Pittsburgh, Main, University of
Tokowicz	Natasha	Associate Professor	Psychology	PhD	Pennsylvania State University, Main
Votruba-Drzal	Elizabeth	Associate Professor	Psychology	PhD	Northwestern University
Warren	Tessa	Associate Professor	Psychology	PhD	Massachusetts Institute of Technology
Wright	Aidan	Assistant Professor	Psychology	PhD	Pennsylvania State University, Main

Chilson	Clark	Associate Professor	Religious Studies	PhD	Lancaster University
Denova	Rebecca	Senior Lecturer	Religious Studies	PhD	Pittsburgh, Main, University of
Feig	Haya	Lecturer II	Religious Studies	MA	London, University of
Gordon	Benjamin	Assistant Professor and Rosenberg and Perlow Fellow	Religious Studies	PhD	Duke University
Hayden	Milica	Lecturer II	Religious Studies	PhD	Chicago, University of
Jouili	Jeanette	Assistant Professor	Religious Studies	PhD	Ecole de Hautes Estudes
Kane	Paula	Professor/(Marous Chair)	Religious Studies	PhD	Yale University
Kranson	Rachel	Assistant Professor	Religious Studies	PhD	New York University
Penkower	Linda	Associate Professor	Religious Studies	PhD	Columbia University, Main Division
Shear	Adam	Associate Professor	Religious Studies	PhD	Pennsylvania, University of
Birnbaum	David	Professor	Slavic Languages and Literatures	PhD	Harvard University
Condee	Nancy	Professor	Slavic Languages and Literatures	PhD	Yale University
Duraskovic	Ljiljana	Lecturer	Slavic Languages and Literatures	PhD	Ohio State University Main
Furniss	Edie	Lecturer	Slavic Languages and Literatures	PhD	Pennsylvania State University, Main
Padunov	Vladimir	Associate Professor	Slavic Languages and Literatures	PhD	Cornell University Endowed Colleges
Platt	Jonathan	Assistant Professor	Slavic Languages and Literatures	PhD	Columbia University, Main Division
Swan	Oscar	Professor	Slavic Languages and Literatures	PhD	California, Berkeley, University of
Votruba	Martin	Senior Lecturer	Slavic Languages and Literatures	PhD	Comenius University of Bratislava
Bamyeh	Mohammed	Professor	Sociology	PhD	Wisconsin, Madison, University of

Banerjee	Tarun	Assistant Professor	Sociology	PhD	State University of New York, Stony Brook
Blee	Kathleen	Distinguished Professor	Sociology	PhD	Wisconsin, Madison, University of
Bloom	Joshua	Assistant Professor	Sociology	PhD	California, Los Angeles, University of
Brush	Lisa	Professor	Sociology	PhD	Wisconsin, Madison, University of
Duck	Waverly	Associate Professor	Sociology	PhD	Wayne State University
Epitropoulos	Mike	Senior Lecturer	Sociology	PhD	Pittsburgh, Main, University of
Howell	Junia	Assistant Professor	Sociology	PhD	Rice University
Hughes	Melanie	Associate Professor	Sociology	PhD	Ohio State University Main
Markoff	John	Distinguished University Professor	Sociology	PhD	Johns Hopkins University
Moss	Dana	Assistant Professor	Sociology	PhD	California, Irvine, University of
Nelson	Rod	Lecturer II	Sociology	PhD	Toronto, University of
Paterson	Mark	Assistant Professor	Sociology	PhD	Bristol, University of
Romesberg	Daniel	Senior Lecturer	Sociology	PhD	Pittsburgh, Main, University of
Singh	Vijai	Professor	Sociology	PhD	Wisconsin, Madison, University of
Smith	Jacquelyn	Professor	Sociology	PhD	Notre Dame, University of
Staggenborg	Suzanne	Professor	Sociology	PhD	Northwestern University
Bodenschatz	Carl	Senior Lecturer	Statistics	PhD	Texas, Austin, University of
Chen	Kehui	Assistant Professor	Statistics	PhD	California, Davis, University of
Cheng	Yu	Associate Professor	Statistics	PhD	Wisconsin, Madison, University of

Iyengar	Satish	Professor	Statistics	PhD	Stanford University
Jung	Sung Kyu	Assistant Professor	Statistics	PhD	North Carolina, Chapel Hill, University of
Mentch	Lucas	Assistant Professor	Statistics	PhD	Cornell University
Pfenning	Nancy	Senior Lecturer	Statistics	PhD	Carnegie-Mellon University
Ren	Zhao	Assistant Professor	Statistics	PhD	Yale University
Sampson	Allan	Professor	Statistics	PhD	Stanford University
Stoffer	David	Professor	Statistics	PhD	California, Davis, University of
Batista	Kenneth	Associate Professor	Studio Arts	MFA	Temple University
Commandaros	Joanna	Lecturer II	Studio Arts	MFA	Kent State University, Main
Henderson	Aaron	Associate Professor	Studio Arts	MFA	Chicago Academy of Fine Arts
Jenkins	Delanie	Associate Professor	Studio Arts	MFA	Colorado, Boulder, University of
Morrill	Michael	Associate Professor	Studio Arts	MFA	Yale University
Thomas	Lenore	Associate Professor	Studio Arts	MFA	Wisconsin, Madison, University of
Weissberger	Barbara	Senior Lecturer	Studio Arts	MFA	San Francisco Art Institute
Croot	Cynthia	Associate Professor	Theatre Arts	MFA	Columbia University, Main Division
Downs	Gian	Lecturer	Theatre Arts	MFA	Brandeis University
Duggan	Annmarie	Associate Professor	Theatre Arts	MFA	Arizona, University of
Frankenberry	Robert	Lecturer	Theatre Arts	MM	Carnegie-Mellon University
George	Kathleen	Professor	Theatre Arts	PhD	Pittsburgh, Main, University of
Gilmer	Karen	Lecturer	Theatre Arts	MFA	Boston University
Granshaw	Michelle	Assistant Professor	Theatre Arts	PhD	Washington, University of

Jackson-Schebetta	Lisa	Assistant Professor	Theatre Arts	PhD	Washington, University of
Schebetta	Dennis	Assistant Professor	Theatre Arts	MFA	Virginia Commonwealth University
Glass	Michael	Lecturer II	Urban Studies	PhD	Pennsylvania State University, Main
Lucas	Susan	Lecturer	Urban Studies	PhD	Wilfrid Laurier University

School of Computing and Information

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- Academic Regulations and Standards
- Academic Integrity
- Academic Honors
- Academic Standing
- Bachelor's Degree Requirements
- Graduation
- Special Academic Programs/Opportunities
- School of Computing and Information Faculty
- Programs and Course Offerings

The University of Pittsburgh's School of Computing and Information (SCI) opened on July 1, 2017, building upon the traditions of excellence embodied by the Department of Computer Science and School of Information Sciences. SCI aims to position the University as a leader in preparing students for this increasingly-interconnected world by providing students with excellent disciplinary foundations and training to support our mission to make the world a better place through polymathic education and the science of interacting systems. Our degree programs address the holistic spectrum of computing and information, from producers to users and from science-oriented exploration to human-centric applications. We foresee a future with increased opportunities to expose our students to a multidisciplinary approach to knowledge creation, information management, and computing; expanded experiential learning opportunities; and extended career networks.

SCI represents the confluence of computing and information along with diverse academic disciplines, serving as a valuable resource to researchers, students, and organizations across the University and around the world. SCI is a new school for a new era of research and learning, one in which the power of information and computing will accelerate knowledge discovery and creativity.

The School-level regulations set forth in the following document apply to students who were admitted to the University of Pittsburgh during the 2020-21 Academic Year.

Students admitted prior to this academic year should refer to the Archived Catalogs for the regulations governing their undergraduate studies. The following is a guide for navigating the archived catalogs for degree requirements.

Admitted to Pitt / Catalog Publication	School Requirements	Major Requirements
2018-19 or 2019-20	SCI Catalog page	All Majors: Department and major-specific SCI Catalog pages
2017-18	CS Majors: SCI Catalog; navigate to the CS Department Catalog pages	
2017-18	IS Majors: SCI Catalog; navigate to the Dept. of Informatics and Networked Systems pages	
2016-17 or earlier	Arts& Sciences Catalog	CS Majors: CS Department and major-specific pages
2016-17 or earlier	School of Information Sciences Catalog	IS Majors: IS Department and major-specific pages

Undergraduate students may opt into a newer set of School-level policies and degree requirements and newer major-level requirements. Note, students electing into a new set of requirements may only opt into School and major requirements of the same year. In order to elect into new requirements, the student must meet with their advisor to discuss this process.

Contact Information

Mailing address for the Office of the Dean and other SCI administrative offices:

University of Pittsburgh

School of Computing and Information

Office of the Dean

135 North Bellefield Avenue

Pittsburgh, PA 15260

Detailed contact information for all departments, offices, and staff can be found on the SCI "Contact Us" web page.

Admission Requirements and Deadlines

SCI is a four-year undergraduate school, admitting its first-year students through the Office of Admissions and Financial Aid (OAFA) website. Applicants interested in beginning their studies at SCI as a first-year, non-transfer student should refer to the OAFA website for application prep checklists, access to the application, deadlines, etc.

To be considered for admission, transfer* and second Pitt bachelor's degree applicants must:

- Complete at least 24 credits with a GPA of at least
  - 2.75 (Pittsburgh campus) or
  - 3.00 (Regional campuses, second Pitt bachelor's, and external transfers)
- Finish the equivalent of the First-year SCI Curriculum with grades of "C" or better in each course. The first-year SCI curriculum must minimally include the SCI quantitative mathematics and statistics requirements, programming, and introductory composition. Completion of CMPINF 0010: Big Ideas in Computing and Information course is strongly recommended for Pittsburgh campus internal transfer applicants.
- Sample courses of study within SCI can be found within the catalog pages for individual majors offered within the school.

Please note that these GPA requirements are for consideration only. Individual undergraduate programs reserve the right to close admission to a major once capacity has been reached. Preference will be given to students ready to declare a major; (major eligibility requirements).

Students in Pitt's undergraduate schools or regional campuses at the University should initiate the process of transferring into an SCI program by submitting an Undergraduate Academic Program / Plan Add / Change form with their current campus's Records Office or other administrative center.

*Pittsburgh and regional campus (i.e., internal) transfer applicants should note that the criteria listed above applies only to students admitted to the University of Pittsburgh in Fall 2019 or later. Internal transfer applicants admitted prior to Fall 2019 must be admissible directly to a major (major eligibility requirements) and meet the admissions criteria outlined in the Catalog published in their University admit term in order to be considered for admission to SCI (see the Archived Catalogs).

Application Deadlines

Applications must be received by SCI by the deadlines listed below. Applications received after the deadlines will not be reviewed.

Applicant Type	**Fall term**	**Fall review period**	**Spring term**	**Spring review period**	**Summer term**	**Summer review period**
First year	Rolling admission		Fall term admissions only			
International first year	April 1					
EARLY DEADLINE All transfer, reinstatement, and second bachelor's applicants	March 1	Mid-March	No early admissions			
FINAL DEADLINE All transfer, reinstatement, and second bachelor's applicants	May 15	Late May	October 1	Mid-October	February 1	Mid-February

Applications for internal transfer are reviewed by an admissions committee during specific review periods. Where applicants have completed the minimum required credits and have earned a grade in each of the first-year SCI courses by the admissions deadlines, decisions are made prior to the enrollment period for the upcoming admit term in order to accommodate advising and enrollment in the appropriate Pitt School.

Applicants' grades must be posted for the courses required for admission in order for the application to be considered complete.

Incomplete applications, where grades are not posted for admissions pre-requisite classes by the stated final deadline. In-progress courses, and other courses lacking grades as they appear in the application materials, will not be considered.

Applicants should receive a decision within one to two weeks after the published review period above.

Admissions decisions are communicated by SCI Academic Records to the applicants' University email address. Applicants should monitor their email, including spam/quarantined messages, regularly during the notification periods mentioned above. Admitted students must accept their offer of admission via the Pitt PSMobile application by the last day of the add/drop period of their admissions term.

All applications for external transfer (second-degree, non-Pitt; first-degree transfer; and readmission), including the associated evaluation of course work taken at other colleges and universities, will be reviewed by SCI Academic Records in conjunction with departmental faculty and the Office of Admissions and Financial Aid. Decisions are made in accordance with the timelines noted above and notifications will be made by the Office of Admissions and Financial Aid. Students will later receive an evaluation of transfer credits and a welcome letter from the School.

Applicant Types and Related Policies

The following types of applicants must adhere to the stated admission criteria but should also be aware of policies and procedures specific to their situation.

Admission of Students from Other Countries

Applicants are required to submit original or certified, official secondary school records; literal translations of your records if they are not in English; and an official credential evaluation of all international documents (transcripts, marksheets, certificates, examination results, etc.) from an approved evaluator. See details on the OAFA webpage for International Transcript Evaluation. The application process should be started 9 to 12 months in advance of the intended enrollment date.

An applicant whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and submit official test results.

For more information on international student applications, including TOEFL requirements and exceptions, refer to OAFA's international student admissions webpage.

Second-degree Pitt

Students who have already earned an undergraduate degree at the University of Pittsburgh with a minimum GPA of 2.75 and who are returning to complete a second degree in a major offered through SCI will be considered for admission.

Students who fall into this category should apply directly to the School of Computing and Information. Applicants should note the following:

- Course work for the second degree will continue to be recorded on the original University of Pittsburgh undergraduate transcript.
- All appropriate course work from the first degree will apply to the second degree.
- The cumulative GPA and credit total will be based on all credits from the first degree and any new course work completed that applies to the second degree.
- Students must earn a minimum of 30 new credits.

Second-degree, non-Pitt

Students who completed a degree at another institution submit a Transfer Application and supporting materials to the Office of Admissions and Financial Aid.

Post-baccalaureate and Guest Students

Students who have completed an undergraduate degree and wish to take additional undergraduate courses on a non-degree-seeking basis (post-baccalaureate) or students who are students enrolled in an undergraduate degree program at another university who plan to take courses for credit at the University of Pittsburgh with the intention of transferring those courses back to their home institution (guest students) should apply directly to the College of General Studies (CGS). Eligibility and application instructions are available on the CGS website.

Non-degree-seeking status at CGS is not encouraged for students interested in later applying for internal transfer to SCI. Instead, these students should apply directly to SCI as first-year students through the OAFA website.

Pittsburgh and Regional Campus (Internal) Transfer

Students in Pitt's undergraduate schools or regional campuses at the University should initiate the process of transferring into an SCI program by submitting an Undergraduate Academic Program / Plan Add / Change form with their current campus's Records Office or other administrative center. Students currently on inactive status in the school of last registration must first be reinstated in that school before the transfer process can be completed.

Note: All credits and previously approved exemptions to academic requirements will be re-evaluated by SCI. In some instances, this may mean that not all transfer credits or previously approved exemptions or waivers will be accepted or applied toward a student's SCI career. All credits will be subject to the transfer credit policies listed in this Catalog.

First-degree Transfer from External Institutions

Students at other institutions who wish to apply for admission as transfer students to the School of Computing and Information should submit a Transfer Application and supporting materials to the Office of Admissions and Financial Aid.

Readmission

Students who previously attended the University of Pittsburgh before attending another institution and who wish to return to the University are considered transfer students and must reapply following the guidelines for transfer students. Former students who have enrolled in other institutions may apply for readmission with advanced standing. Such students should submit a Transfer Application and supporting materials to the University's Office of Admissions and Financial Aid.

For more details regarding the different definitions and regulations for readmitted and reinstated students, see the Readmission and Reinstatement section of the SCI Catalog page.

Reinstatement

Students who have left the University for one calendar year or more (whether of their own volition or as a result of a suspension), who did not complete work at another institution, and who wish to continue their studies must apply for reinstatement through the School.

For more details regarding the different definitions and regulations for readmitted and reinstated students, see the Readmission and Reinstatement section of the SCI Catalog.

Evaluation of Transfer Credits

Previous course work for transfer students is evaluated by SCI Academic Records with respect to general education requirements. As well, SCI Academic Records liaises with departments and programs to ascertain transfer credit for major-specific course requirements. Before initial registration, students transferring credits from one Pitt school or campus, or an external institution will receive an Academic Advisement Report that illustrates the requirements that they have satisfied, and which requirements remain to be satisfied in order to complete their degree.

After receiving SCI evaluation of transfer credits, a student may petition for a re-evaluation of courses within the first two terms after matriculation into the School. A student must submit all petitions to transfer or substitute courses taken prior to enrollment at the same time. SCI Academic Records will confer with faculty to evaluate the merit of these petitions.

Transfer credits are subject to the following conditions:

- Courses that have a reasonable counterpart in the curricula of the various schools/departments of the University of Pittsburgh are eligible for transfer. Courses must be passed with a satisfactory grade (minimum of C or equivalent). Transfer course grades are recorded as T grades and are not used in computing a student's GPA, determining probationary status, or determining eligibility for graduation honors.

Transfer credits must be earned at an institution accredited by the appropriate regional accrediting association, and may not be a repetition of any course previously taken (passed or failed) at the University of Pittsburgh.

- An official transcript of all courses taken at other institutions must be submitted at the time of application, whether or not it is intended that such courses be counted toward the degree. For all students who are requesting transfer credit for approved summer or special session coursework, they must submit an official transcript as soon as the course grade is available. No transfer credits will be posted to a University of Pittsburgh transcript without an official transcript from the originating institution.

- No more than 90 credits may be transferred from a four-year institution, and no more than 60 credits may be transferred from a two-year institution with a combined total of no more than 90 transfer credits posted to a student's transcript. No transfer credits will be transferred to a student's record during or after the term in which they achieve a total of 90 earned credits.

- The number of credits granted for a course cannot exceed the number on the transcript from the institution where they were earned nor exceed the number to be earned in the corresponding course at the University of Pittsburgh. Credits earned on the quarter system will be converted into semester credits. A quarter credit is equal to two-thirds of a semester credit (e.g., five quarter-system credits equal three semester credits, and three quarter-system credits equal two semester credits). Converted credits are rounded down to the nearest half.

- If a course is repeated for which advanced standing credit (AP test credit or other) has been granted, the advanced standing credit is canceled. This is monitored once per academic year and it is the student's responsibility to discuss course repeats - including those equivalent to advanced standing credit - with their advisor.

- Current students may also transfer in summer or special session credits from another institution. These credits must follow the aforementioned regulations.

Transfer Guides / Articulation Agreements

The School of Computing and Information utilizes the "Pitt Connection Guides" and official Articulation Agreements maintained by the Office of the Provost when evaluating transfer credits. Students considering a transfer to the School may find these resources useful.

Advanced Standing

In addition to the aforementioned transfer credit options, the School of Computing and Information may accept the following forms of advanced standing, referred to as "test credits."

Advanced Placement (AP) Credits

See the AP credit section of the Office of Admissions and Financial Aid Web site.

International Baccalaureate (IB) Higher-Level Examinations

See the IB Examination section of the Office of Admissions and Financial Aid Web site.

College Level Examination Program (CLEP) Testing

SCI does not accept CLEP general examination credits.

Transferring Out

Students who wish to transfer out of SCI to another school at the University must submit the Academic Program (Transfer Out/Double Degree) Change form available on the School's Current Student website.

Note: All transfer credits and authorized exemptions or waivers are subject to re-evaluation when a student transfers from one school to another within the University of Pittsburgh.

Academic Regulations and Standards

University Registration Policies

Policies on full-time/part-time status, adding and dropping courses, cross-registration, grading systems, etc. are governed by the University at large. Students should refer to the Academic Regulations for general information and contact SCI Academic Records for more details on applying these policies in practice.

Highlighted are frequent topics of inquiry: Registration Status and Process, Withdrawing and Resigning, Grading Options and Calculations

Grading Policies

University Grading and Records

More information regarding grades-definitions of, grade change, and viewing grade reports can be found in the Academic Regulations.

Satisfactory/No-Credit Grade Option Policy

The School of Computing and Information uses both the University's letter grade and Satisfactory/No-Credit (S/NC) grade options (formerly the S/N option, see Grading and Records for more information). In addition to the general University rules governing those grading systems, there are a few formal limitations to the student's freedom of choice regarding grading systems. The student should check with his or her academic advisor before deciding to take a course S/NC.

Note, students choose a grading option (letter grade or S/NC) during enrollment from those listed within the University's Student enrollment system. Any decision to change the grading option after a class has been added to the student's enrollment must be processed (via the Grade Option/Audit Form, see the SCI Current Students > School Forms webpage) no later than four weeks after the start of term. This decision may not be changed, nor may a grade of one kind received for a course be changed to a grade of the other kind (e.g., from an S/NC grade to a letter grade).

Students enrolled in the School of Computing and Information may take at most 30 credits of course work using the Satisfactory/No-Credit (S/NC) system. Aside from this overall limitation on the number of S/NC credits, individual degree programs may place additional requirements upon the use of this grading option within the degree program.

Evaluation of a student's ability and achievement in a course is not eliminated by the Satisfactory/No-Credit (S/NC) system. Recitations, tests, and papers may all be required and assessed by instructors who will convey to the student their judgments of the worth of the student's work. Because the publicly recorded evaluation is minimal, students should use the instructor's comments in the most helpful way possible: as a guide to their own future course of study and for assessment of their own potential.

Since it is difficult to evaluate transcripts containing very few letter grades, students seriously considering transferring to the School of Computing and Information or considering graduate study should keep this in mind. The student may wish to ask instructors from whom they have taken courses on the Satisfactory/No-Credit (S/NC) system to write letters of recommendation for them immediately at the end of the course.

Credit and Enrollment Policies

Residency Requirement

All students must earn a minimum of 30 new credits in residency at the School of Computing and Information, including at least 15 credits within the major program. At least half of the major program credits must be earned at the University of Pittsburgh.

Normal Full-Time Credit Load

A normal full-time credit load ranges from 12 to 18 credits per term, with a minimum of 24 credits in an academic year. Any term credit load in excess of 18 credits requires the approval of the Director of Advising and approval of the Office of the Dean.

Summer or Special Session Course Work

Students in good academic standing may attend a summer or special session at another accredited institution in order to supplement their program. Students must provide a transfer credit request form, course description, and syllabus to initiate a review of potential or completed external courses. The Transfer Credit Request form can be found on the SCI Current Students website.

All summer or special session course work must comply with the transfer credit evaluation guidelines noted under the Evaluation of Transfer Credits section of this Catalog. Transfer credit requests submitted after the completion of an external course are not guaranteed for approval or transfer. For this reason, students should discuss potential studies at external institutions with their advisor and submit the Transfer Credit Request form PRIOR to enrolling in external courses.

Sequential Courses

Credit cannot be earned for courses taken after more advanced course work in the same field has been successfully passed with a C or higher. For example, credit cannot be earned for an algebra course taken after the successful completion of a calculus course.

ELI classes

LING 0007, LING 0008, and LING 0009 courses may be counted towards the 120 credits required for the degree.

Physical Education

Students are not required to take any courses in physical education (PEDC), but may elect to do so. Up to four credits of courses offered by the School of Education's Department of Health, Physical, and Recreation Education may be counted toward an SCI degree.

ROTC

Credits earned in aerospace science (Air Force ROTC), military science (Army ROTC), or naval science (Navy ROTC through cross-registration at Carnegie Mellon University [CMU]) are not accepted toward an SCI degree. In lieu of physical education and recreation courses, the School will grant up to four credits toward graduation for the following military science courses: AFROTC 0001, AFROTC 0002, AFROTC 0003, and AFROTC 0004; MILS 0012 and MILS 0022; Navy ROTC courses from CMU.

Independent Study, Undergraduate Research, and Internships

SCI students may earn up to 24 credits of independent study, undergraduate research, and internships as part of the 120 credits required for a degree. Ordinarily, no more than six credits may be earned in any term in a single undergraduate research experience or internship. Under certain conditions, students in good standing may register for a block of 15 credits of independent study. These credits are to be earned for work done within one academic term. A student may register for a 15-credit independent study term only once during his or her college career. This needs to be approved by the Dean prior to registration.

Learning Agreement forms for independent study and undergraduate research are available from the academic department through which the activity will be conducted. Internship application packets are available through SCI Student Services.

Eligibility, procedures, and guidelines, are governed by the academic department, therefore inquiries should be sent to the student's advisor.

Directed Research: The student pursues a defined research project on campus under the guidance of a faculty member.

Independent Study: Involves an independent program of study, research, or creative activity designed under specified conditions and is usually conducted off-campus with less immediate direction by the sponsoring faculty member.

Internships: a supervised, work-related experience, either volunteer or compensated. It is intended to be a new experience, not an existing position in which the student is already working. Students will only get internship credit for a current employment situation that has been pre-approved as an internship by the relevant school or department. Participation in the co-operative program falls under this category.

Cooperative Programs: To provide an opportunity to apply classroom knowledge within a real-world context, SCI students may participate in the cooperative program run out of the Swanson School of Engineering (SSOE). The Cooperative Education Office within SSOE has established arrangements with industry partners that permit students to rotate four-month terms between the workplace and the classroom. These are paid positions related to the student's field of study. The experience normally starts in the sophomore or junior year. A student may complete a maximum of four rotations, totaling four credits toward their degree.

Any student registering for directed research, independent study, internship for credit, or coop must receive consent. Students should speak to their advisor as other restrictions may apply.

Study Abroad Credit Policies

SCI students may pursue as many abroad experiences as allowed by the Study Abroad Office. However, the maximum total of credits that may be applied to an undergraduate degree is bound by SCI's limit S/NC credits. Any credits earned during study abroad programs with the satisfactory/no credit (S/NC) grading option will calculate into the S/NC credit limits listed above.

Before study abroad is undertaken, approval for credit must be obtained. The study abroad advisor provides program approval while the student's SCI advisor will assist with course selections and verifying Pitt equivalencies with either the SCI department (if the equivalent is offered within SCI-controlled subject areas) or SCI Academic Records (if the equivalent is offered outside of SCI). After this step is complete, the advisor signs the Study Abroad Office's form; final approval is communicated through SCI Academic Records. Students should have at least a 2.75 GPA before seeking permission from their advisor to study abroad.

Completion of any study abroad experience will fulfill the "Global Awareness and Cross-Cultural Understanding" requirement within the Polymathic Context section of the general education requirements. This is in addition to fulfillment of other requirements (general education or major) as pre-approved by the student's advisor, department, and/or the Dean's Office.

Graduate Classes

Undergraduates with sufficient preparation are encouraged to take advantage of the rich variety of graduate courses offered by the departments and schools within the University. Students enrolled in the School of Computing and Information may use credits in graduate courses toward their undergraduate degree. These may not be counted as credits toward a graduate degree except for students admitted into a BS/MS degree program. To enroll in a graduate course, students must obtain the written consent of the instructor of the course, have a 3.00 cumulative GPA, and have the approval of the director of the undergraduate program. See the University's allowable credits and course limitations regulations for details.

Course Repeat Policy

Required courses for a major must be repeated or replaced by a comparable course if a grade does not meet the program's minimum requirements (see Department page for specifics). If the minimum acceptable grade is not earned after meeting the course repeat limit, the student may have to transfer out of SCI, or select a different major within SCI.

Course repetitions are subject to the University's defined limitations:

- A sequenced course may not be repeated for credit if the student passes a higher sequence course with a C or better grade.
- A student may not enroll in the same course at another institution and have that grade replace the original grade earned at the University.
- The original course and grade remain on the transcript; however, the grade and credits originally earned are not counted in the calculation of the GPA.
- The grade earned by repeating a course is used instead of the grade originally earned. W, R, or N grades reported for the repeated course will not be identified as a course repeat, and therefore the original grade earned will continue to be counted in the GPA. Incomplete grades (G) are not identified as repeated courses until the course work is completed.
- Students are only permitted to repeat a course twice.

SCI Academic Records automatically submits the Registrar's Course Repeat Form for students who have repeated the exact same course (i.e., repeating INFSCI 0017). However, any student who is replacing a course with a comparable one (i.e., replacing INFSCI 0017 with CMPINF 0401), must submit a Course Repeat Form to their advisor PRIOR to enrollment. The advisor will review course repeat policies with the student and submit the form to Records on behalf of the student at the end of term. This form is available on the School's Current Students website.

In all cases, it is the responsibility of the student to ensure their repeat course grades have been updated with the "Repeated - Excluded from GPA" flag on their academic record and that all credits have been calculated correctly. Students should discuss repeat courses with their advisor at the beginning and end of the term of repeated enrollment.

Statute of Limitations

The School's statute of limitations requires that all of the credits required for the Bachelor of Science degree, whether earned in residence or transferred from another institution, must have been earned within 12 years prior to the date on which the degree is awarded. However, when given evidence that the previous courses still provide adequate preparation for courses yet to be taken and still represent a reasonable part of the total academic program, with support of their advisor, students may appeal to the Dean's Office to waive this limitation. In such cases, the waiver is for a specific period during which the program must be completed.

Readmission and Reinstatement

A student record without enrollment for three consecutive terms becomes inactive. Students in inactive status must apply for readmission or reinstatement. By University definitions, readmitted students previously attended the University of Pittsburgh and then enrolled at another external institution. Reinstated students previously attended the University of Pittsburgh and left for one or more calendar years, not attending external institutions in the meantime. These terms are attached to specific application processes and graduation requirements.

Readmitted students follow the School and degree graduation requirements and rules based upon their term of readmission. Their statute of limitations is reset to their term of readmission and their transfer credits, advanced standing, and previously authorized exemptions will be reevaluated at the point of readmission. Students may apply for readmission by submitting the transfer application available on the Office of Admissions and Financial Aid website.

Reinstated students follow the School and degree requirements and rules based upon their original term of entry to the School. Their statute of limitations is calculated against their original term of entry to the University and their transfer credits, advanced standing, and previously authorized exemptions will be accepted as previously approved at the point of reinstatement. Students interested in reinstatement should submit the Reinstatement application available on the Current Students website.

NOTE: Students whose leave extends two years or more from the close of their last term of enrollment to the start of their reinstatement term will be subject to the requirements of the School and of their major and/or certificate programs at the time of their reinstatement, rather than those in place at the time of their last attendance.

A note on advising appointments and on returning from a break in continuous enrollment: Since registration advising meetings are usually held from the seventh to the twelfth week of the preceding term, applications for reinstatement should be received within that period so that the advisor may assist in planning the program and in registering the student. Similarly, students who are returning from inactive status should keep this timeline in mind for setting up an appointment with their advisor.

Regardless of the conditions surrounding a student's leave - an intentional leave of absence, suspension, or an extended lapse in enrollment requiring reinstatement - when a student returns, they return in the standing attached to their record (good, warning, or probation) at the term of their departure.

Any courses that a student takes at another institution during a period of suspension shall not be granted credit by the School after the student has been reinstated.

Academic Advising

Academic Advising in SCI supports the SCI Mission by facilitating deep, integrative learning, supporting students through their decision making, and developing holistic, cohesive educational plans.

SCI assigns newly matriculated students an academic advisor with whom they will work until graduation. The academic advising relationship is integral to students' intellectual, personal, and professional growth. Academic advisors will help students to make informed educational choices regarding course selection as well as co-curricular and experiential education opportunities. In addition to their assigned academic advisor, students will have the opportunity to work with faculty mentors who can provide consultation regarding discipline-specific matters.

Advisor/Advisee Expectations

In SCI, we envision academic advising as a relationship with shared responsibilities.

Advisor responsibilities:

- Be available for one-on-one in-person, web conference, and phone meetings.
- Provide accurate information about SCI academic requirements, policies, and procedures.
- Be knowledgeable about campus resources and will make appropriate referrals when necessary.

- Help students to make informed educational decisions regarding courses, co-curricular activities, experiential education, and community engagement.
- Help students to understand their unique interests and values.
- Help students to understand the purposes of higher education, the missions of the University and SCI, and the way they inform and influence the curriculum.
- Help students to develop polymathic sensibilities.
- Help students to think about why they are in college, what they want to learn, what problems they want to solve, and how to use their time at Pitt to figure these things out and make progress toward them.

Student responsibilities:

- Schedule at least one appointment with your advisor each semester.
- Prepare for your appointment by reviewing your Academic Advisement Report and other supplementary educational planning documents.
- Be prepared to discuss your strengths, interests, skills, and values, as well as what you are learning in your classes and co-curricular experiences.
- Be prepared to discuss which courses you want to take, why you want to take them, and what you expect to learn from them.
- Read your emails.
- Take ownership of your education.
- Assume final responsibility for the selection of courses, degree progress, and educational planning.
- Learn about the requirements for the degree as well as relevant policies and procedures. Most of the information you need can be found here on the SCI Current Student website. Follow through on the plan designed with your advisor and keep them apprised of any barriers you encounter.

Tracking Your Degree Progress (AAR)

In order for students to verify that they are making progress toward graduation, they should regularly review their academic advisement report (AAR). This report is submitted with the graduation application as a contract between the School and the student. If a student finds a data entry error in their AAR, they should contact SCI Academic Records. Typically these requests include "Best Fit" changes (re-directing courses to the appropriate requirement area) or corrections to posted transfer credits.

Requirement exceptions must be pre-approved by the Program Director for major requirements; General Education Requirements exceptions are pre-approved by the Dean's Office via SCI Academic Records. Exceptions are approved only in extenuating circumstances and students should consult with their advisor for guidance on exceptions that are appropriate to request. Approval of an exception will be noted on the student's AAR.

Maintenance of a student's AAR is the responsibility of the student and will expedite the graduation certification process. As well, the AAR provides detailed course options for fulfilling all requirements for the degree. When using the AAR online, students have quick access to schedule details for approved courses and links to enrollment.

It is recommended that students continually monitor their AAR and utilize this tool frequently for enrollment and advisement purposes.

Informational videos and documents related to the AAR can be found on the Registrar's Student Training website.

Other University Regulations

The University has a number of official policies affecting students. For a summary of these policies and links to complete and current text on all University policies, students should thoroughly review the information provided under Academic Regulations.

Highlighted are frequent topics of inquiry: Student Rights and Responsibilities, Family Educational Rights and Privacy Act (FERPA), Harassment Policies, Student Service Indicators Policy

Academic Integrity

Students have the responsibility to be honest and to conduct themselves in an ethical manner while pursuing academic studies. Students have the right to be treated by faculty in a fair and conscientious manner in accordance with the ethical standards generally recognized within the academic community (as well as those recognized within the profession). Should a student be accused of a breach of academic integrity or have questions regarding faculty responsibilities, procedural safeguards including provisions of due process have been designed to protect student rights. These may be found in Guidelines on Academic Integrity: Student and Faculty Obligations and Hearing Procedures.

Academic Honors

Dean's List

Each term, a list is compiled of students whose academic record in the preceding term indicates outstanding academic achievement. To be placed on the School's Dean's List, a student must have earned at least 12 letter grade credits (not including courses taken on the Satisfactory/No-Credit option) with a term GPA of at least 3.50. As well, no grade earned during the term in review may be lower than a C. Both full-time and part-time students are eligible for placement on the Dean's list. For part-time students, grades from the preceding two terms (which must total at least 12 letter grade credits) are used to determine eligibility for the Dean's list.

Honors

Undergraduate students may be graduated with University Honors. Criteria for University Honors are posted under the University's Academic Regulations.

Program honors may be awarded at the point of graduation. Students should refer to their department or program's information page within the SCI catalog.

Academic Standing

The School is committed to the success of its students and has guidelines in place to connect students with the appropriate resources at the earliest sign of academic difficulty. students' academic standing is maintained and monitored each term by the Dean's office. A student's academic standing is comprised of three factors: term GPA, cumulative GPA, and progress toward a degree. In order to be in good academic standing, students in the School of Computing and Information are expected to maintain a cumulative GPA and term GPA of 2.00 or above for each term of enrollment. In addition, full-time students are expected to successfully complete a minimum of 12 credits during each term of enrollment. Part-time students are expected to successfully complete a minimum of 3 credits during each term of enrollment.

Students are placed in the **Academic Warning** status if they earn a term GPA below 2.00 or a cumulative GPA between 2.00 and 2.125.

Students are placed in the **Academic Probation** status after earning a term GPA below 2.00 over two consecutive terms or have one semester below 2.00 cumulative GPA. Students may also be placed on Academic Probation if they fail to make progress toward their degree, as determined by University standards and/or Department or Program requirements. More information on Satisfactory Academic Progress standards can be found at https://oafa.pitt.edu/financialaid/satisfactory-academic-progress.

Students currently on Academic Probation who earn a term GPA below 2.00 or fail to make progress toward their degree will be subject to **Academic Suspension**. After being suspended, students are not eligible to re-enroll for one calendar year. Students on Academic Probation or Suspension are not eligible to earn credits at another institution toward a School of Computing and Information degree. Following suspension, students are required to apply for reinstatement (see details below).

Students who have been reinstated from Academic Suspension must earn a GPA of at least 2.00 for each term that they enroll until they have achieved a cumulative GPA of 2.00 or above. If a student fails to earn 2.00 term GPA, they are subject to **Academic Dismissal**. Dismissal is a final action. Dismissed students are not eligible for reinstatement in the School of Computing and Information.

Students who are not on academic probation or academic suspension are considered to be in good academic standing. Students will be notified by letter if they are no longer in good academic standing.

Bachelor's Degree Requirements

Graduation requirements differ among degrees. However, all degrees require a minimum of 120 passing credits with a minimum 2.00 overall GPA, completion of the School's First-Year Courses, General Education Requirements, Major Requirements, Secondary Field of Study, and a Capstone Experience. Furthermore, students must earn at least half of the credits for their major(s), minor(s), and certificates(s) and the final 30 credits toward the School of Computing and Information degree while enrolled as an SCI student.

General Education Requirements

All students are required to complete general education requirements. These courses are meant to provide foundational skills and breadth of knowledge, aiming to provide students with a broad exposure outside of their core discipline of study while encouraging a focus on the application of techniques from the classroom to meaningful problems.

Full lists of specific courses that meet the following requirements, referred to as "approved courses" or "course lists" are determined by faculty review and are available to students through the Academic Advisement Report and/or the "Plan by my requirements" tool found in the enrollment system. Additionally, students may use the enrollment systems to "Search by requirements" or filter by class attributes to refine the approved course list for a requirement to those that are being offered in a term. Informational videos and documents related to the AAR and other advisement and enrollment resources can be found on the Registrar's Student Training website.

Note: Transfer students receive an evaluation of their previous course work indicating the equivalent University of Pittsburgh courses for which transfer credits have been awarded. Courses will meet requirements for the major where deemed appropriate by the Department. Students who believe that they have an exceptional case for petitioning for a course to meet either a general education or a major requirement should submit the appropriate "exemption form," available on the SCI Current Students website. Students should speak with their advisor before completing the form - after the form is submitted, the request will be vetted by the student's advisor and approved or denied by SCI Academic Records.

First Year Courses

Students must complete a gateway course (CMPINF 0010 - BIG IDEAS IN COMPUTING AND INFORMATION) that provides an understanding of the connections between computing and information and other disciplines; the commonalities among and differences between the problems, tools, and methodologies of various computing and information sub-disciplines; and basic technical skills that will serve them as they advance through any computationally-oriented degree program. CMPINF 0010 focuses on ideas and insights that cross-cut computing and information disciplines, as well as underlie problems in other disciplines. Students learn about the complex interconnections between the natural, social, and engineered systems that we interact with every day, and explore how computing and information can be used to model, understand, and reason about the complex problems occurring within this space.

Students must also complete a required first-year seminar (CMPINF 0001 - SCI FIRST-YEAR SEMINAR; 1 credit, S/NC) that provides an introduction to SCI and the University of Pittsburgh. This course addresses a range of issues including academic mechanics (e.g., advising, registration, university structure, financial aid, academic and professional communication), academic support services and opportunities (e.g., tutoring centers, study abroad, internships and co-ops, undergraduate research), student support services (e.g., career services, counseling center, student health services), and other student opportunities (e.g., Pitt FYE, campus recreation, cheap seats, etc.).

Skills Courses

Skills requirements help ensure that all students attain appropriate levels of competence in writing, communication, and quantitative and formal reasoning. Students may be placed in or exempted from skills requirements based upon certain achievement test scores, University of Pittsburgh placement test scores, or course work completed at other colleges and universities. Skills requirements are outlined below. All skills courses must be completed with a grade of C or higher.

Expression (3 courses): Communication in its various forms is central to all disciplines and professions. The approved courses will assist students in developing the skills to express thoughts and ideas as appropriate for professional or graduate education or for professional employment.

- Introductory Composition
- Technical, Business, or Research Writing
- Communications

Quantitative (2 courses): Quantitative skills are the bedrock for success in the computing and information fields. Approved courses will provide an introduction to university-level mathematics and statistics.

- One course in university-level mathematics for which algebra is a pre-requisite
- An approved course in statistics

Polymathic Context

SCI degree programs address the holistic spectrum of computing and information, from producers to users and from science-oriented exploration to human-centric applications. The following requirements facilitate the development of a multidisciplinary approach to knowledge creation, information management, and computing by immersing students in a variety of intellectual contexts that are crucial to understanding problems at the confluence of natural, social, and engineered systems to which computing and information skills can be brought to bear.

Scientific Context (3 courses): These courses introduce students to scientific principles and concepts rather than offering a simple codification of facts in a discipline or a history of a discipline.

- 2 approved sequenced courses in one discipline
- 1 course in a second discipline OR a third course in the sequenced discipline

Ethical and Policy Context (1 course): It is crucial for students engaging in computing-and information-related studies to develop an awareness of the interplay between technology, computing, ethics, and societal implications. Approved courses emphasize close and critical reading of theories about knowledge, reality, humanity, and values. Courses could focus on human nature; scientific reasoning; theories of cognition and consciousness; human/social rights; competing systems of belief; morality; concepts of freedom; theories of justice; social obligations/constraints; or ethics, including applied or professional ethics.

At least one course from each of the following three categories (5 courses total)

- **Global Awareness and Cross-Cultural Understanding**: Approved courses examine significant issues that are global in scale. Courses could address, for example, globalization, the global and cultural impact of climate change/sustainability; the effects of and resistances to colonialism; or worldwide issues related to health, gender, ethnicity, race, technology, labor, law, or the economy. Other approved courses will focus on an understanding of cultures, traditions, and societies that differ substantially from those that prevail in North America and Europe.
- **Social and Behavioral Sciences**: Approved courses treat topics considered of significant importance in the social or behavioral sciences (including social psychology). Courses will introduce students to the subject matter and methodology of a particular discipline and will involve them in the modes of investigation, analysis, and judgment characteristically applied by practitioners. Other approved courses focus on significant cultural, social, economic, or political accounts of the past. The course may focus on pivotal moments of change, or important transitions over longer periods of time. Courses could explore developments in science, technology, literature, or art, and the ideas around them, or examine critical historical shifts by analyzing various data or cultural forms.
- **Humanistic Context**: Generally covering courses focusing on literature, the arts, and creative work. This requirement exposes students to courses that introduce the techniques and methods of textual analysis and develop critical perspectives on a variety of forms of cultural expression. Additionally, courses may cover modes of analysis appropriate to music, theatre, or the visual and plastic arts. Finally, some approved courses will result in the production of some form of creative work, training students in the techniques and modes of its production. These courses could be situated in theatre, studio arts, writing, visual arts (including photography, film), music, and dance; or it may be a course that engages in innovative or original work in relation to written, oral, or visual material, new media, social media, and other contemporary forms of communication and representation.

Diversity (1 course): Diversity courses focus centrally and intensively on issues of diversity, and do so in a manner that promotes understanding of difference. They provide students with analytical skills with which to understand structural inequities and the knowledge to be able to participate more effectively in our increasingly diverse and multicultural society. The courses may address, though not be limited to, such issues as race, gender, ethnicity, sexuality, religious difference, ability difference, and/or economic disparity.

Diversity courses may also be courses that fulfill other General Education or Major Requirements.

Total: 14 courses

Secondary Field of Study

To emphasize the intersections that computing and information have with other disciplines, students will be required to achieve some depth of study within another discipline. This requirement may be satisfied via several mechanisms:

- Completion of a joint degree program offered by SCI and another School on campus
- Completion of a minor or second major
- Completion of an approved certificate program

- Completion of an approved 15-credit related area

Requirements for the Major

See the program offerings pages for the major requirements.

Capstone Experience

To provide an opportunity to apply classroom knowledge within a real-world context, all SCI students will complete a capstone experience as part of earning their degree. The mechanisms for satisfying the capstone requirement will be determined and defined by the faculty of the individual degree programs.

Degree programs allow this requirement to be satisfied in a number of ways, including:

- Approved internship or co-op experiences
- Directed research sponsored by a faculty member
- Capstone-designated project courses

The capstone typically requires 2-3 credits to complete.

Declaring a Major

Major Declaration

SCI students may declare a major in the term following the successful completion of all major eligibility requirements. Students declare a major by submitting the Undergraduate Academic Plan Change (Major Declaration) form found on the SCI Current Students website.

The Major Declaration form is active each term during the window of two weeks before the term begins through the close of the add/drop period. The general timeframe for submitting the form and processing turnaround is as follows. Students should refer to the Academic Calendar for specific add/drop dates:

Fall term declaration period	Fall declarations processed	Spring term declaration period	Spring declarations processed	Summer (12-week) term	Summer declarations processed
Mid-August to Early September	Mid-September	Early to Mid-January	Late January	Early to Mid-May	Late May

Students who miss the deadline to declare for the upcoming term will be able to declare for the following term, however, all are strongly encouraged to declare their major at the earliest possible point in their career.

Minor Declaration & Secondary Field of Study

Students declaring an SCI minor must complete the Minor/Secondary Field of Study Declaration form. This form is available on the SCI Current Students website and is active throughout the academic year and processed within one to two weeks.

SCI students fulfilling the Secondary Field of Study requirement with a curated combination of related courses (15-credit related area) must discuss this with their Academic Advisor before submitting the Minor/Secondary Field of Study Declaration form. Students should submit the form after they have successfully completed their Secondary Field of Study. If it is the student's term of graduation, they need only to indicate their Secondary Field of Study on the graduation application.

Students who are completing a second bachelor's degree, a joint degree program, a second major, a minor outside of SCI (e.g., history, studio arts), or a certificate program do not need to submit the Minor/Secondary Field of Study Declaration form.

Graduation

Student Status During Term of Graduation

Students must be in active status during their term of graduation. This means they must have enrolled in a minimum of one credit within the three terms previous to graduation. They must also be in good academic standing.

Application

Graduation is not an automatic process. Students must file an application for graduation and include a printed Academic Advisement Report (AAR) with their application. The School's deadlines, related late fees, instructions for printing an AAR, and contact information for graduation applications are available on its Current Students > Graduation Procedures website.

To apply for graduation, a student must make an appointment with the Undergraduate advisor in the term PRIOR to their anticipated graduation term in order to determine their status and eligibility for graduation.

If your graduation is postponed, **you must reapply** by completing another Graduation Application.

Graduation Ceremonies

University Commencement

Candidates for graduation are encouraged to appear in person at the University Commencement Ceremony, usually held the Sunday after the spring term ends. Although degrees are conferred at commencement for all graduation periods, the official certification for April and May graduates occurs several weeks after the ceremony.

School Ceremony

The School of Computing and Information hosts an event to recognize its graduating students and awardees at the end of each term. The ceremony includes a speech to graduates, an address from Program Representatives, and a reading of individual graduate names.

Certification of degree graduation requirements is processed after the recognition ceremony; Reading of a student's name at the Recognition Ceremony is not an indication of the student having met graduation requirements.

Event details, travel tips, and information regarding tickets are hosted on the School's website at www.sci.pitt.edu.

Post-Graduation Processing

Certification

Graduation certification is the process run by advisors and staff to ensure students have met all graduation requirements. This process is run after grades are posted for the term in question. Students who are concerned about their graduation eligibility should first review their academic advisement report (AAR) and then meet with their academic advisor.

Documentation (transcripts, diplomas, etc.)

Official documentation of graduation is managed by the University Registrar's Office. Inquiries regarding transcripts and diplomas should be directed to that office's Graduation/Diplomas service area.

All diplomas are mailed to students approximately six to eight weeks after the official certification date for each graduation period. Questions regarding diploma mailing should be directed to the Office of the University Registrar.

Special Academic Programs/Opportunities

Multiple Majors Within SCI

Students can declare multiple majors within SCI but will earn only one degree.

Students wishing to declare multiple majors within SCI should submit the Academic Plan (Major/Minor) Declaration Form found on the School's Current Students website.

Dual Degrees

Students in the School of Computing and Information may choose to simultaneously pursue more than one undergraduate degree within the University. In general, earning two degrees requires a minimum of 150 credits and completion of the curriculum requirements of both schools. Detailed information about dual degrees or joint programs is available from the student's academic advisor.

Students wishing to apply for a dual degree outside of SCI should submit the Academic Program Change (Transfer Out/Double Degree) form found on the School's Current Students website.

Bachelors of Philosophy

Only a few colleges in the nation offer a prestigious Bachelor of Philosophy (BPhil), which is a model borrowed from Oxford and Cambridge in the UK. The BPhil is a higher distinction that replaces the standard BS degree. The BPhil can be earned in any major and is jointly awarded by the University of Pittsburgh Honors College and the School of Computing and Information.

Completion of a BPhil is a rigorous process that requires a research component and final thesis beyond that of the student's regular course of study. For details regarding the requirements, process, and personalized mentoring for the BPhil degree, visit the University Honors College's BPhil website.

BS/MS

Some degree programs offer an accelerated BS/MS course of study that begins during a student's last two semesters of undergraduate enrollment. Applications are accepted through SCI's online application portal. A student admitted into a BS/MS program begins their graduate courses during their final year of undergraduate studies. They are not officially flagged as a graduate student for enrollment or financial aid purposes until after their undergraduate degree is conferred. See individual program offerings for further details.

SCI and the University Community

SCI encourages students to build a network of peers with similar academic interests from across the University. To facilitate this personal, academic, and professional growth, SCI participates in an Academic Community, hosted by the Dietrich School of Arts and Sciences, and the Living Learning Communities managed through Student Affairs.

Academic Communities (AC) require a commitment of three classes which will be completed in the student's first term with other students of the same AC. The classes focus on a specific area of study representing the theme of the AC. It's an unmatched opportunity to meet like-minded students right away and to explore interests and possible major with others who share similar passions.

Living Learning Communities (LLCs) are specialized living environments that connect students inside-and outside-the-classroom experiences. Each LLC is unique, but all are centered on a distinctive theme or academic interest area. Students who choose to live in an LLC have a direct connection to their classroom experience, access to intentional events and programs, and dedicated staff members who work to make the community a success. Some LLCs require students to register for specific classes, class sections, or outside of the classroom activities; please refer to the individual LLC pages for additional requirements. Please refer to the Student Affairs' LLC webpage for details.

Study Abroad

Students are encouraged to add an international dimension to their undergraduate education through engagement with available study abroad programs. Credits may be earned toward the School's degrees through participation in one of several University of Pittsburgh programs or consortia-sponsored programs.

Please refer to the study abroad credit policies for further regulations pertaining to study abroad credits. For details regarding current opportunities and incorporating study abroad experiences into the SCI curriculum, students should visit the Study Abroad website.

SCI is currently working on developing study abroad programs specifically for our student population in Australia, the United Kingdom, and Ireland. If students wish to learn more about study abroad they must make an appointment with the Director of Experiential Learning.

MSIS Guarantee for Pitt and Regional Campuses

Students who have earned a Bachelor of Science in Information Science (BSIS) on Pitt's Oakland campus are guaranteed admission to the Master of Science in Information Science (MSIS) if they meet the following criteria:

- A separate application is not necessary for consideration. When students submit an application for admission with OAFA, they should select indicate "Information Science" from the Guaranteed Admission Program drop-down box.
- Only students admitted as first-year students can be considered for the guarantee.
- Achieve a minimum SAT score of 700 (Math) or a minimum score of 30 on the Math section of the ACT.
- Complete the BSIS program and enroll in the MSIS program within five calendar years of being awarded the Information Science guarantee by the Office of Admissions and Financial Aid.
- Maintain a 3.25 QPA while in the BSIS program with no grade (throughout your college career) lower than a C.

School of Computing and Information Faculty

School of Computing and Information Faculty

Programs and Course Offerings

Joint Major

Computational Biology, BS

Computational Biology Requirements

Computational biology is a growing field of study in the life sciences. This major, which is administered by the Department of Biological Sciences in the Dietrich School and the Department of Computer Science in the School of Computing and Information, trains students in the computer programming, laboratory techniques, and other skills they will need to succeed in graduate school and in the workforce. This major requires completion of 64 credits of coursework, detailed as follows.

Students may declare a major in Computational Biology after completing the following courses or their equivalents with a letter grade of C or higher.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- CHEM 0110 - GENERAL CHEMISTRY 1
- CHEM 0120 - GENERAL CHEMISTRY 2
- CS 0011 - INTRODUCTION TO COMPUTING FOR SCIENTISTS

Transfer students who have finished these requirements prior to admission to the University of Pittsburgh are asked to complete one term of course work, including at least one BIOSC course that counts toward the major, before declaring within the Dietrich School. Transfer students applying to the School of Computing and Information who have finished these requirements prior to admission to the University of Pittsburgh may be admitted directly into the major - note, transfer application requirements for SCI are outlined in the Catalog under "Admission Requirements and Procedures ."

Biological Sciences courses

All of the following courses are required for the major.

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1 or
- BIOSC 0155 - HONORS FOUNDATIONS OF BIOLOGY 1

- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2 or

- BIOSC 0165 - HONORS FOUNDATIONS OF BIOLOGY 2

- BIOSC 0350 - GENETICS
- BIOSC 1000 - BIOCHEMISTRY
  *Students may alternately choose BIOSC 1810 MACROMOLECULAR STRUCTURE AND FUNCTION and BIOSC 1820 METABOLIC PATHWAYS AND REGULATION in lieu of BIOSC 1000. In this case, BIOSC 1820 becomes the elective course.

Computer Science courses

All of the following courses are required for the major.

- CS 0011 - INTRODUCTION TO COMPUTING FOR SCIENTISTS
- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- CS 0441 - DISCRETE STRUCTURES FOR CS
- CS 0445 - DATA STRUCTURES
- CS 1501 - ALGORITHM IMPLEMENTATION
- CS 1656 - INTRODUCTION TO DATA SCIENCE

Computational Biology courses

All of the following courses are required for the major.

- BIOSC 1540 - COMPUTATIONAL BIOLOGY

- BIOSC 1542 - COMPUTATIONAL GENOMICS or
- BIOSC 1544 - SIMULATION AND MODELING

- BIOSC 1630 - COMPUTATIONAL BIOLOGY SEMINAR

Capstone course

Students must choose one of the following capstone courses.

- BIOSC 1640 - COMPUTATIONAL BIOLOGY RESEARCH
- CS 1640 - BIOINFORMATICS SOFTWARE DESIGN

Co-requisite Chemistry courses

All of the following courses are required for the major.

- CHEM 0110 - GENERAL CHEMISTRY 1 or
- CHEM 0710 - UHC GENERAL CHEMISTRY 1

- CHEM 0120 - GENERAL CHEMISTRY 2 or
- CHEM 0720 - UHC GENERAL CHEMISTRY 2

- CHEM 0310 - ORGANIC CHEMISTRY 1 or
- CHEM 0730 - UHC ORGANIC CHEMISTRY 1

Co-requisite Mathematics and Statistics courses

Both of the following courses are required for the major.

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- STAT 1000 - APPLIED STATISTICAL METHODS

Elective courses

Students must select one course from the following list.

- BIOSC 0351 - GENETICS LABORATORY
- BIOSC 0370 - ECOLOGY
- BIOSC 1005 - INTRODUCTION TO BIOCHEMISTRY LAB
- BIOSC 1130 - EVOLUTION
- BIOSC 1285 - GENOMICS LABORATORY
- BIOSC 1320 - POPULATION BIOLOGY
- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1520 - DEVELOPMENTAL BIOLOGY
- BIOSC 1760 - IMMUNOLOGY
- BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION
  * This course must be taken in conjunction with BIOSC 1810 MACROMOLECULAR STRUCTURE AND FUNCTION; the pair of courses are taken in lieu of BIOSC 1000 BIOCHEMISTRY.
- BIOSC 1850 - MICROBIOLOGY
- BIOSC 1940 - MOLECULAR BIOLOGY
- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY
- CHEM 0320 - ORGANIC CHEMISTRY 2
- CHEM 1460 - INTRO MODERN COMPUTATIONAL SCI
- CHEM 1830 - SYNTHETIC BIOLOGY
- CS 1502 - FORMAL METHODS IN COMPUTER SCIENCE
- CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS
- CS 1555 - DATABASE MANAGEMENT SYSTEMS
- CS 1566 - INTRODUCTION COMPUTER GRAPHICS
- CS 1675 - INTRODUCTION TO MACHINE LEARNING
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- NROSCI 1000 - INTRO TO NEUROSCIENCE
- PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)
- STAT 1221 - APPLIED REGRESSION

Additional Requirements

Writing (W) requirement

Dietrich School students must complete at least one W-course in the major. BIOSC 1630 - COMPUTATIONAL BIOLOGY SEMINAR meets this requirement.

Grade requirements

All courses offered by the departments of Biological Sciences and Computer Science must be completed with a letter grade of C or better.

Co-Requisite courses

Students must complete co-requisite courses in the departments of Mathematics, Statistics, and Chemistry with an overall average of C or better, with the exceptions of CHEM 0110 GENERAL CHEMISTRY 1 and CHEM 0120 GENERAL CHEMISTRY 2. Students must earn letter grades of C or better in each of these classes.

Honors

A Dietrich School student may achieve honors in the Department of Biological Sciences by meeting these requirements:

1. Maintain a minimum GPA of 3.25;
2. Complete a faculty-supported research project; and
3. Complete an Honors Thesis. Details about the required thesis are available at www.biology.pitt.edu/undergraduate/advising-and-support/honors.

A School of Computing and Information student may achieve honors in the Department of Computer Science by meeting these requirements:

1. Maintain a minimum overall GPA of 3.25; and
2. Maintain a major GPA (CS and Biological Science courses) of 3.5; and
3. Complete an additional major elective course with a grade of A.

Satisfactory/No Credit option

One core course required for the major may be taken on an S/NC basis. Co-requisite courses may be taken on an S/NC basis subject to School limitations.Please check with your School for specific information on S/NC grades.

Restrictions

- All BIOSC courses at the 0800-level are designed for non-majors and therefore do not count toward the major.
- Independent study and independent research credits do not count toward the major. The Department of Biological Sciences encourages students to seek out these experiences in order to enhance their education.

Digital Narrative and Interactive Design, BA/BS

The Digital Narrative and Interactive Design major (DNID) harnesses the narrative, world-building, and media studies strengths of the English department and the coding, software development, and human computer interface strengths of the School of Computing and Information. It draws upon existing initiatives in game design at SCI and critical game studies, making, and media production within the English department. Students will learn how to build interactive narrative systems such as games, interactive literature, virtual reality environments and other interactive media experiences in a variety of fields. They will learn to creatively combine design with narrative, code with story. This uniquely positions majors in today's workforce: game and interactive media designis booming in nearly every field and sector. What these positions require,and what is currently in short supply, are individualscapable of both understanding the intricacies of narrative and implementing that knowledge in the form of computational media (coded interactive systems).

The DNID major is managed jointly by the Dietrich School of Arts and Sciences and the School of Computing and Information. This program offers training that builds a solid foundation in English (Writing, Composition, Film and Media Studies, and Literature), Computer Science, and Information Science.

Digital Narrative and Interactive Design Requirements

The Digital Narrative and Interactive Design major (DNID) harnesses the narrative, world-building, and media studies strengths of the English department and the coding, software development, and human computer interface strengths of the School of Computing and Information. It draws upon existing initiatives in game design at SCI and critical game studies, making, and media production within the English department. Students will learn how to build interactive narrative systems such as games, interactive literature, virtual reality environments and other interactive media experiences in a variety of fields. They will learn to creatively combine design with narrative, code with story. This uniquely positions majors in today's workforce: game and interactive media design is booming in nearly every field and sector. What these positions require, and what is currently in short supply, are individuals capable of both understanding the intricacies of narrative and implementing that knowledge in the form of computational media (coded interactive systems).

The DNID major is managed jointly by the Dietrich School of Arts and Sciences and the School of Computing and Information. This program offers training that builds a solid foundation in English (Writing, Composition, Film and Media Studies, and Literature), Computer Science, and Information Science.

Core and Upper Level Courses

Gateway course

Choose one of the following courses.

- ENGLIT 0512 - NARRATIVE AND TECHNOLOGY
- ENGCMP 0425 - DIGITAL HUMANITY
- HAA 0425 - DIGITAL HUMANITY

Composition courses

Complete either:

- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN
- ENGLIT 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN
- CMPINF 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN

Programming Basis course

Choose one of the following courses.

- CS 0010 - INTRODUCTION TO COMPUTING FOR SYSTEMS ENGINEERS
- CS 0011 - INTRODUCTION TO COMPUTING FOR SCIENTISTS
- CS 0012 - INTRODUCTION TO COMPUTING FOR THE HUMANITIES
- INFSCI 0419 - PYTHON PROGRAMMING FOR DATA MANAGEMENT & ANALYTICS

Intermediate Programming course

- CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA
- INFSCI 0017 - FUNDAMENTALS OF OBJECT-ORIENTED PROGRAMMING

Interaction and Narrative course

Choose one of the following courses. Students who take ENGLIT 0512 for their Gateway course may not use it to fulfill this requirement.

- ENGLIT 0512 - NARRATIVE AND TECHNOLOGY
- ENGLIT 0702 - INTRODUCTION TO GAME STUDIES
- ENGLIT 1001 - INTERACTIVE LITERATURE
- ENGLIT 1002 - GAME, STORY, PLAY

Media Literacy course

Choose one of the following courses.

- ENGFLM 0355 - VISUAL LITERACY
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 1680 - ANIMATION STUDIES
- FMST 0100 - VISUAL LITERACY
- FMST 0505 - INTRODUCTION TO NEW MEDIA
- FMST 1510 - ANIMATION STUDIES

Data Literacy course

Choose one of the following courses.

- CS 0445 - DATA STRUCTURES
- INFSCI 1022 - DATABASE MANAGEMENT SYSTEMS

Elective courses

Students must complete two elective courses from the **School of Computing and Information** and two elective courses from the **Dietrich School of Arts and Sciences**. Courses offering a depth of knowledge in pre-identified areas of interest are clustered together to provide a guide for students; Students are not required to follow nor declare a specific track.

Online Media track

School of Computing and Information courses

Choose two of the following courses.

- CS 0590 - SOCIAL IMPLICATIONS OF COMPUTING TECHNOLOGY
- CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS
- INFSCI 1024 - ANALYSIS OF INFORMATION SYSTEMS
- INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN
- INFSCI 1052 - USER CENTERED DESIGN
- INFSCI 1068 - GEOSPATIAL INFORMATION SYSTEMS (GIS)

Dietrich School of Arts and Sciences courses

Choose two of the following courses.

- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGLIT 0812 - MEDIA/ECOLOGY
- ENGLIT 1001 - INTERACTIVE LITERATURE
- ENGLIT 1412 - SECRET PITTSBURGH
- ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA
- ENGWRT 1501 - TOPICS IN CREATIVE WRITING
- GSWS 1210 - GENDER AND THE DIGITAL
- ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE

Game Design track

School of Computing and Information courses

Choose two of the following courses.

- CS 1566 - INTRODUCTION COMPUTER GRAPHICS
- CS 1666 - PRINCIPLES OF COMPUTER GAME DESIGN AND IMPLEMENTATION
- CS 1674 - INTRODUCTION TO COMPUTER VISION
- INFSCI 1014 - GRAPHICS
- INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN
- INFSCI 1060 - GAME DESIGN
- INFSCI 1061 - GAME IMPLEMENTATION

Dietrich School of Arts and Sciences courses

Choose two of the following courses.

- ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION
- ENGFLM 0570 - INTRODUCTION TO NEW MEDIA
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGLIT 0702 - INTRODUCTION TO GAME STUDIES
- ENGLIT 0812 - MEDIA/ECOLOGY
- ENGLIT 1001 - INTERACTIVE LITERATURE
- ENGLIT 1002 - GAME, STORY, PLAY
- ENGLIT 1355 - VIRTUAL REALITY
- ENGWRT 0520 - INTRODUCTION TO FICTION WRITING

Critical Making track

School of Computing and Information courses

Choose two of the following courses.

- CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS
- CS 1567 - PROGRAMMING SYSTEM DESIGN ON A MOBILE ROBOT PLATFORM
- CS 1571 - INTRODUCTION TO ARTIFICIAL INTELLIGENCE
- INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN
- INFSCI 1059 - WEB PROGRAMMING

Dietrich School of Arts and Sciences courses

Choose two of the following courses.

- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0712 - CRITICAL MAKING
- ENGCMP 1200 - ADVANCED TOPICS IN COMPOSITION
- ENGFLM 0590 - FILMMAKING: PRODUCTION AND CRITICISM
- ENGFLM 0712 - CRITICAL MAKING
- ENGFLM 0812 - MEDIA/ECOLOGY
- ENGLIT 0521 - SCAN CULTURE: SURVEILLANCE AND THE DIGITAL
- ENGLIT 0712 - CRITICAL MAKING
- ENGLIT 0812 - MEDIA/ECOLOGY
- ENGLIT 1355 - VIRTUAL REALITY
- ENGWRT 1501 - TOPICS IN CREATIVE WRITING

Capstone sequence

The Capstone sequence allows students to design and implement a signature project to complete the major. Students start with the design project (Project 1) and complete the sequence with the implementation project (Project 2) in consultation with their advisors. Students seeking Independent Study or Directed Study options for the capstone sequence should work with their advisors to ensure that the work done in these courses will complete the sequence.

Project 1

Choose one of the following courses.

- ENGCMP 1910 - BRIDGE SEMINAR
- ENGLIT 1900 - PROJECT SEMINAR
- ENGLIT 1901 - INDEPENDENT STUDY

Project 2

- CMPINF 1981 - PROJECT STUDIO
- CS 1902 - DIRECTED STUDY

Additional Information

Writing (W) requirement: Dietrich School students must complete at least one W-course in the major. ENGCMP 0610 fulfills this requirement.

Grade requirements: A letter grade of C or better is required in each of the core and upper level courses that are to count toward the major. The elective courses for the major must also be completed with a grade of C or better. A minimum GPA of 2.0 in all departmental courses taken is required for graduation. If a D+ or lower is earned in an elective course for the major but is not repeated, the course will be used to calculate the overall GPA but will not be counted toward the 40 credits required for the major.

Satisfactory/No Credit option: No courses that count toward the major may be taken on an S/NC basis.

Advising: Digital Narrative and Interactive Design is a joint undergraduate degree between the Dietrich School of Arts and Sciences and the School of Computing and Information. Students enrolled in each school are advised by advisors within that school.

Department of Computer Science

The Department of Computer Science is part of the School of Computing and Information. It offers a Bachelor of Science in Computer Science degree, a Computer Science minor, and a Bachelor + Master of Science in Computer Science. See programs below for more information.

Major

Computer Science, BS

Note: The requirements outlined in this section represent minimum degree satisfaction. Please consult the School of Computing and Information's website for detailed policies, procedures, forms, and advising resources.

The department-level rules set forth in the following document apply to students who declared their CS major during or after the 2019-2020 Academic Year. Students who declared prior to this academic year should refer to the Archived Catalogs for departmental-level rules.

Students who declared the CS major PRIOR to the 2017-2018 Academic Year will find the department-level rules to which they are bound by going to the Archived Catalogs for Arts & Sciences.

Eligibility for Major

To be considered for admission to the CS undergraduate program, students must complete the following CS core courses with a grade of C or better in each course:

- CMPINF 0401 - INTERMEDIATE PROGRAMMING*
- CS 0441 - DISCRETE STRUCTURES FOR CS
- CS 0445 - DATA STRUCTURES
- CS 0447 -COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE

*Students should have some programming experience (usually acquired in high school) before taking CMPINF 0401. Any high school course that includes the writing of several Python, C++, or Java programs would be sufficient. It is also possible to take one of the department's service courses, such as CS 0007, as preparation. Preparatory classes of this nature do not count toward the student's major requirements.

Grade Policies for CS Majors

Satisfactory/No-Credit (S/NC) Grade Options

Students should check with their academic advisors before deciding to take a course S/NC (formerly the S/N option). Beyond the School's Regulations for students enrolling in courses with the S/NC grade option, the Department of Computer Science imposes the following rules:

- All computer science courses for the major (core and upper-level courses) must be taken for a letter grade.
- Required mathematics courses may be taken with the S/NC option.

Students should be sure, before deciding on the grading system for a course, that their decision will not have an adverse effect on their plans for a major. They must discuss this decision with their advisor PRIOR to enrolling and selecting the S/NC grade option.

Individual Course Grades

All computer science courses for the major (core and upper-level courses) must be completed with a C grade or better to count for the CS major. ANY course taken to satisfy a major requirement, including MATH courses required by the major (MATH 0220, MATH 0230, and either STAT 1000, STAT 1100 or STAT 1151), for which only a C- grade or lower is received, must be repeated. If a grade of C- or lower is earned in a prerequisite course, the course must be repeated before the higher-level course may be taken.

Departmental Honors

Students may graduate with honors if they have also:

- Completed a sixth upper-level elective CS course
- Have a CS GPA of at least 3.5
- Have an overall GPA of at least 3.25

Major Requirements

The computer science major requires 40 credits in computer science courses, an additional 11-12 credits in mathematics and/or statistics, and a capstone experience as detailed below:

Core Courses

A minimum of 16 credits must be satisfactorily completed in the following five core courses:

- CMPINF 0401 - INTERMEDIATE PROGRAMMING*
- CS 0441 - DISCRETE STRUCTURES FOR CS
- CS 0445 - DATA STRUCTURES
- CS 0447 - COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE
- CS 0449 - INTRODUCTION TO SYSTEMS SOFTWARE

*Students should have some programming experience (usually acquired in high school) before taking CMPINF 0401. Any high school course that includes the writing of several Pascal, C++, or Java programs would be sufficient. It is also possible to take one of the department's service courses, such as CS 0007, as preparation. Preparatory classes of this nature do not count toward the student's major requirements.

Required Upper-Level Elective Courses

Nine credits in these three upper-level courses:

- CS 1501 - ALGORITHM IMPLEMENTATION
- CS 1502 - FORMAL METHODS IN COMPUTER SCIENCE
- CS 1550 - INTRODUCTION TO OPERATING SYSTEMS

Upper-Level Elective Courses

Fifteen additional credits in upper-level elective courses (numbered 1500 or higher) must also be completed.

Internships, directed studies, capstone courses and co-op courses may not be used to satisfy this requirement (see below).

Required Mathematics Courses

A minimum of 11-12 credits in mathematics must be completed as follows:

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2
- STAT 1000 - APPLIED STATISTICAL METHODS

-Or -

- STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

-Or -

- STAT 1151 - INTRODUCTION TO PROBABILITY

Note: Students should complete their required mathematics courses early. Typically, MATH 0220 would be completed in the freshman year. Strong students may elect also to take MATH 1180 - LINEAR ALGEBRA 1.

Capstone Experience

All Computer Science majors must complete a capstone experience prior to graduation. This experience may be satisfied in several ways including:

- Completion of an approved 3-credit academic internship (CS 1900)
- Completion of an approved 3-credit directed research project (CS 1950)
- Completion of a capstone designated course (ex: CS 1980)
- Completion of at least 2 rotations of an approved co-op (ENGR 1093)

Students are allowed to complete more than one capstone experience but a capstone course may NOT be used in place of a CS Upper-Level Elective course

Sample Plan of Study

Below is a sample plan for students in the Computer Science Major in the School of Computing and Information. Note that there are many paths through the Computer Science major and any student's path may differ from the one shown. Generally, our advisors will help each student to customize his / her career plan.

Prior to Admission, this plan assumes that a student has:

- An Intro. to Programming course
- Workshop in Composition (ENGCMP 0150) satisfied by SAT score
- Sufficient Math background to take Calculus 1

	Fall	Spring
Year 1	CMPINF 0401 (4 cr) MATH 0220 (4 cr) CMPINF 0001 (1 cr) CMPINF 0010 (4 cr) ENGCMP 0200 (3 cr) **TOTAL: 16 credits**	CS 0445 (3 cr) MATH 0230 (4 cr) GER (3 cr) STAT 1000 (4 cr) **TOTAL: 14 credits**
Year 2	CS 0441 (3 cr) CS 0447 (3 cr) GER (3 cr) GER (3 cr) Elective (3 cr) **TOTAL: 15 credits**	CS 0449 (3 cr) CS 1501 (3 cr) GER (3 cr) GER (3 cr) Elective (3 cr) **TOTAL: 15 credits**
Year 3	CS 1502 (3 cr) CS 1550 (3 cr) GER (3 cr) GER (3 cr) Elective (3 cr) **TOTAL: 15 credits**	CS UL 1 (3 cr) CS UL 2 (3 cr) GER (3 cr) GER (3 cr) Elective (3 cr) **TOTAL: 15 credits**
Year 4	CS UL 3 (3 cr) CS UL 4 (3 cr) CS 1900 (Capstone) (3 cr)	CS UL 5 (3 cr) CS UL 6 or Elective (3 cr) GER (3 cr)

	Fall	Spring
	GER (3 cr) Elective (3 cr) **TOTAL: 15 credits**	Elective (3 cr) Elective (3 cr) **TOTAL: 15 credits**

Note 1: GER = General Education Requirement, UL = Upper-level

Note 2: Electives may be used for the SCI requirement of a secondary field of study (ex: minor, certificate, etc).

Note 3: One course must satisfy the Diversity Requirement.

Note 4: CS UL 6 may be used for CS Department Honors. See the Departmental Honors section of this Catalog for details and requirements.

Computer Science, BS/MS

The BS degree in computer science requires 120 credits of course work, including 40 credits in computer science, 11 or 12 credits in mathematics and statistics and a capstone experience. Typically, a student completes this degree in four academic years. Well-prepared students may apply for admission to the combined bachelor's / master's degree program. This accelerated program allows students to begin taking graduate courses in their fourth year and complete the combined BS / MS degree in five years. Please contact the Department of Computer Science for additional information.

Minor

Computer Science Minor

A 16 credit minor in computer science is available. The minor is essentially 5 of the 6 courses that are considered the "core" of the CS major. This is a rigorous minor. This minor is not intended for casual students interested in computer literacy.

The requirements for the CS minor are:

- CMPINF 0401 - INTERMEDIATE PROGRAMMING*
- CS 0445 - DATA STRUCTURES
- CS 0447 - COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE
- CS 1501 - ALGORITHM IMPLEMENTATION
- and one of the two courses: CS 0441 - DISCRETE STRUCTURES FOR CS, CS 0449 - INTRODUCTION TO SYSTEMS SOFTWARE**.

*CMPINF 0401 requires programming experience as a prerequisite. A student without any programming background would be advised to take the 3 credit course CS 0007 as preparation for CMPINF 0401.

**The typical minor consists of CMPINF 0401, CS 0441, CS 0445, CS 0447 and CS 1501, is a prerequisite for CS 1501. However, students with very strong math backgrounds (ex: Math majors) may be able to waive the CS 0441 prerequisite for CS 1501 and thus take CS 0449 rather than CS 0441.

Department of Informatics and Networked Systems

The Department of Informatics and Networked Systems is part of the School of Computing and Information. It offers a Bachelor of Science in Information Science. Please select the program below for more information.

Major

Information Science, BS

The department-level rules set forth in the following document apply students who admit to the University during the **2020-21 Academic Year**. Students who admitted prior to this academic year should refer to the Archived Catalogs for departmental-level rules and major requirements.

Students who admitted to the University PRIOR to the 2017-2018 Academic Year will find the department-level rules and major requirements to which they are bound by going to the Archived Catalogs for the School of Information Sciences.

Note: The requirements outlined in this section represent minimum degree satisfaction. Please consult the School of Computing and Information's Current Students Web site for detailed policies, procedures, forms, and advising resources.

To make information systems more effective, Information Science majors must understand how people interact with data and the networks that carry data, as well as understand the science of networks between people and those between humans and machines. This integrated approach considering the interplay of humans, information, and networks is the foundation of the Bachelor of Science in Information Science major.

Graduates of the major will have:

- Deep theoretical and conceptual understanding of the roles and relationships between *humans, information, and networks*, toward modeling and designing information systems;
- Enhanced proficiency in skills needed to create, design, build, and protect information systems and networks;
- Increased capability to apply theory and concepts to real-world situations;
- Stronger competencies in areas such as communications, critical thinking, problem solving, leadership, and adapting to changes in technologies and users' needs.

Eligibility for Major

Students can declare the IS major after they have completed CMPINF 0401, INFSCI 0310, and two other courses (from INFSCI 0410, 0510 and 0610) with a grade of C or better in each class.

In addition, students need to have at least a 2.0 overall GPA and be in good academic standing.

Students must declare the major by the School's deadlines.

- CMPINF 0401 - INTERMEDIATE PROGRAMMING
- INFSCI 0410 - HUMAN-CENTERED SYSTEMS
- INFSCI 0510 - DATA ANALYSIS
- INFSCI 0610 - NETWORKS AND INFORMATION

Grade Policies for Information Science Majors

Satisfactory/No-Credit (S/NC) grade options for IS majors

The student should check with his or her academic advisor before deciding to take a course S/NC (formerly the S/N option). Beyond the School's Regulations for students enrolling in courses with the S/NC grade option, the Department of Informatics and Networked Systems (DINS) does not accept S grades for courses required for the completion of the Information Science major except for the Cooperative Program and Internship courses.

Students should be sure, before deciding on the grading system for a course, that their decision will not have an adverse effect on their plans for a major. They must discuss this decision with their advisor PRIOR to enrolling and selecting the S/NC grade option.

Individual Course Grades & GPA Requirement

Students must achieve a 2.0 GPA for each of the classes counted toward the Information Science major, therefore earning a C or better for each course counted towards graduation in the Information Science major. As such, all courses completed for the major (Quantitative Math and Stats, Core, Upper-Level Electives, and Capstone) must be repeated or replaced by a comparable course if a grade of C- or lower is received. If a grade of C- or lower is earned in a prerequisite course, the course must be repeated before the higher-level course may be taken. If a grade of C- or lower is earned in any course taken to satisfy a major requirement, the course must be repeated or replaced. Course repetitions are subject to the School's Course Repeat Policy found in the Credit and Enrollment Policy section of the SCI Catalog.

Departmental Honors

Students may graduate with honors if they have also:

- Completed a sixth upper-level elective IS course (numbered above 1100). The student may not use an independent study or internship to count as this additional upper-level course.
- Have an IS GPA of at least 3.5
- Have an overall GPA of at least 3.25

Major Requirements

Beginning in Fall 2020, students declaring an IS major will be required to complete:

- One approved programming course
- Seven core courses
- Five upper-level electives
- Two approved mathematics courses
- One approved statistics course
- One capstone class

Programming Course

- CMPINF 0401 - INTERMEDIATE PROGRAMMING

Core Courses

- INFSCI 0310 - COMPUTATION IN INFORMATION SCIENCE
- INFSCI 0510 - DATA ANALYSIS
- INFSCI 0610 - NETWORKS AND INFORMATION
- INFSCI 1400 - ANALYSIS OF INFORMATION SYSTEMS
- INFSCI 1500 - DATABASE MANAGEMENT CONCEPTS AND APPLICATIONS
- INFSCI 0410 - HUMAN-CENTERED SYSTEMS
- INFSCI 1600 - SECURITY AND PRIVACY

Upper-level Electives

- INFSCI 1420 - USER-CENTERED DESIGN
- INFSCI 1430 - USER EXPERIENCE ENGINEERING
- INFSCI 1440 - SOCIAL COMPUTING
- INFSCI 1450 - GAME DESIGN
- INFSCI 1460 - IT PROJECT MANAGEMENT
- INFSCI 1470 - IMMERSIVE MEDIA TECHNOLOGIES
- INFSCI 1520 - INFORMATION VISUALIZATION
- INFSCI 1530 - DATA MINING
- INFSCI 1540 - DATA ENGINEERING
- INFSCI 1550 - SPATIAL INFORMATION
- INFSCI 1560 - INFORMATION STORAGE AND RETRIEVAL
- INFSCI 1570 - NETWORK AND WEB DATA TECHNOLOGIES
- INFSCI 1620 - ADVANCED SECURITY AND PRIVACY
- INFSCI 1630 - COMMUNICATION NETWORKS
- INFSCI 1640 - WIRELESS NETWORKS
- INFSCI 1650 - MULTIMEDIA COMMUNICATIONS
- INFSCI 1660 - COMPUTER NETWORKING LABORATORY

Required Mathematics and Statistics Courses

Students must complete the following quantitative and statiscal skills classes. One class from each section will overlap with the School's General Education Requirements.

- MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
  OR MATH 1180 - LINEAR ALGEBRA 1 OR MATH 1185 - HONORS LINEAR ALGEBRA

- STAT 1000 - APPLIED STATISTICAL METHODS
  OR STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

Capstone

Students in the BS in Information Science major are required to successfully complete a capstone experience, learning how to apply what they learned in the classroom to real-world situations. Students can choose from among a selection of experiential learning opportunities including team-based project classes, independent study courses supervised by research faculty in the School, and internships/co-ops with regional or national industries and organizations. The capstone requirement means that students will gain valuable experience that is aligned with their interests and career goals.

- INFSCI 1082 - INFORMATION SCIENCE COOPERATIVE PROGRAM (2 rotations and completion of a paper required)
- INFSCI 1700 - DATA-DRIVEN COMMUNICATION
- INFSCI 1710 - DIRECTED STUDY (3 credits required)
- INFSCI 1720 - INTERNSHIP (3 credits required)
- INFSCI 1730 - INDEPENDENT STUDY (3 credits required)
- INFSCI 1740 - TEAM-BASED CAPSTONE PROJECT (3 credits required)

Sample Plan of Study

	Fall	Spring
Year 1	CMPINF 0001 CMPINF 0010 CMPINF 0401 ENGCMP 0200 MATH 0220 **TOTAL: 16 credits**	INFSCI 0310 INFSCI 0410 STATS 1000 or 1100 GER Elective **TOTAL: 16 credits**
Year 2	MATH 0280 (or 1180 or 1185) INFSCI 0510 INFSCI 0610 GER GER **TOTAL: 15 credits**	INFSCI 1400 INFSCI 1500 INFSCI 1600 GER GER **TOTAL: 15 credits**
Year 3	INFSCI Upper Elective 1 Related Area 1 GER GER GER **TOTAL: 15 credits**	INFSCI Upper Elective 2 INFSCI Upper Elective 3 Related Area 2 Related Area 3 GER **TOTAL: 15 credits**

	Fall	Spring
Year 4	INFSCI Upper Elective 4 INFSCI Upper Elective 5 Related Area 4 GER GER **TOTAL: 15 credits**	INFSCI Capstone Related Area 5 Elective Elective Elective **TOTAL: 13 credits**

Minimum credits are represented, this may vary depending on student's course selection.

Grand-parenting and the new School of Computing and Information

Computer Science (CS) undergraduate majors who matriculated into the University of Pittsburgh PRIOR to Fall 2017 received a communication allowing a choice to either remain in the School of Arts & Sciences or transfer to the new School of Computing and Information for completion of their CS degree.

- If a student chose to remain in the School of Arts & Sciences, they should refer to the Arts & Sciences catalog for the regulations, policies, and requirements for their degree.
- If a student applied to transfer to the School of Computing and Information, they should refer to the new school's catalog for the regulations, policies, and requirements for their degree.

Note: If a student took no action in response to the grand-parenting e-mail, they will remain in the School of Arts & Sciences by default.

For any students matriculated into the University of Pittsburgh PRIOR to Fall 2017 who have not yet declared a CS major, the student will choose to either declare their Computer Science major in the School of Arts & Sciences or apply to the School of Computing and Information.

Any student matriculating into the University of Pittsburgh AFTER Fall 2017, must apply to the School of Computing and Information in order to pursue an undergraduate degree in either Computer Science or Information Science and should refer to this School's catalog for information.

If you have additional questions or concerns, please contact the School's Office of Student Services at SCIug@pitt.edu.

School of Computing and Information Faculty

Name	**Title**	**Department**	**Highest Degree**	**Awarding Institution**
Daniel Ahn	Teaching Assistant Professor	Computer Science	PhD	University of Illinois at Urbana-Champaign
Malihe Alikhani	Assistant Professor	Computer Science	PhD	Rutgers University
Katharine Anderson	Visiting Assistant Professor	Informatics and Networked Systems	PhD	University of Michigan
Amy Babay	Assistant Professor	Informatics and Networked Systems	PhD	Johns Hopkins University
Dmitriy Babichenko	Clinical Associate Professorlable	Informatics and Networked Systems	PhD	University of Pittsburgh
Mary K. Biagini	Associate Professor	Information Culture and Data Stewardship	PhD	University of Pittsburgh
Jacob Biehl	Associate Professor	Computer Science; Information Culture and Data Stewardship	PhD	University of Illinois at Urbana-Champaign
Kayla Booth	Research Assistant Professor; Director, i3 Program	Information Culture and Data Stewardship	PhD	Pennsylvania State University

Peter Brusilovsky	Professor	Informatics and Networked Systems	PhD	Moscow State University
Matthew Burton	Lecturer	Information Culture and Data Stewardship	PhD	University of Michigan
Shi-Kuo Chang	Professor	Computer Science	PhD	University of California at Berkeley
Arjun Chandrasekhar	Teaching Assistant Professor	Computer Science/School of Computing and Information	PhD	University of California San Deigo
Bruce R. Childers	Professor; Interim Dean	Computer Science	PhD	University of Virginia
Panos Chrysanthis	Professor	Computer Science	PhD	University of Massachusetts at Amherst
Sheila Corrall	Professor	Information Culture and Data Stewardship	PhD	University of Southampton
James "Kip" Currier	Assistant Professor	Information Culture and Data Stewardship	PhD	University of Pittsburgh
Luis de Oliveira	Teaching Assistant Professor	Computer Science	PhD	University of Porto
Nicholas L. Farnan	Lecturer II	Computer Science	PhD	University of PIttsburgh
Rosta Farzan	Associate Professor	Informatics and Networked Systems	PhD	University of Pittsburgh
Morgan Frank	Associate Professor	Informatics and Networked Systems/Information Culture and Data Stewardship	PhD	Massachusetts Institute of Technology
William C. Garrison	Lecturer II; Assistant Dean	Computer Science	PhD	University of Pittsburgh
Chelsea Gunn	Teaching Assistant Professor	Information Culture and Data Stewardship	PhD	University of Pittsburgh
Milos Hauskrecht	Professor	Computer Science	PhD	Massachusetts Institute of Technology
Daqing He	Professor	Informatics and Networked Systems	PhD	University of Pittsburgh
Stephen Hirtle	Professor	Informatics and Networked Systems	PhD	University of Michigan
Timothy L. Hoffman	Lecturer	Computer Science	Master's	University of Pittsburgh
Rebecca Hwa	Associate Professor	Computer Science	PhD	Harvard University
Seong Jae Hwang	Assistant Professor	Computer Science	PhD	University of Wisconsin-Madison
Ahmed Ibrahim	Teaching Assistant Professor	Informatics and Networked Systems	PhD	University of Kentucky
Xiaowei Jia	Assistant Professor	Computer Science	PhD	University of Minnesota, Twin Cities
James B.D. Joshi	Professor	Informatics and Networked Systems	PhD	Purdue University
Hassan Karimi	Professor	Informatics and Networked Systems	PhD	University of Calgary
Sherif Khattab	Lecturer I	Computer Science	PhD	University of Pittsburgh
Thumrongsak Kosiyatrkul	Lecturer II	Computer Science	PhD	Syracuse University
Konstatinos Kosta	Visiting Assistant Professor	Computer Science	PhD	University of Cyprus

Adriana I. Kovashka	Assistant Professor	Computer Science	PhD	University of Texas in Austin
Prashant Krishnamurthy	Professor; Department Chair	Informatics and Networked Systems	PhD	Worcester Polytechnic Institute
William J. Laboon	Lecturer/Assistant Instructor	Computer Science	PhD	Carnegie Mellon University
Alexandros Labrinidis	Professor; Department Chair	Computer Science	PhD	University of Maryland, College Park
John R. Lange	Associate Professor	Computer Science	PhD	Northwestern University
Alison Langmead	Associate Professor	Information Culture and Data Stewardship	PhD	Columbia University
Adam J. Lee	Associate Professor; Associate Dean	Computer Science	PhD	University of Illinois--Urbana Champaign
Stephen Lee	Assistant Professor	Computer Science	PhD	University of Massachusetts, Amherst
Michael Lewis	Professor	Informatics and Networked Systems	PhD	Georgia Institute of Technology
Yu-Ru Lin	Associate Professor	Informatics and Networked Systems	PhD	Arizona State University
Diane J. Litman	Professor	Computer Science	PhD	University of Rochester
Elizabeth Mahoney	Lecturer	Information Culture and Data Stewardship	PhD	University of Albany
Eleanor Mattern	Teaching Assistant Professor	Information Culture and Data Stewardship	PhD	University of Pittsburgh
Rami Melhem	Professor	Computer Science	PhD	University of Pittsburgh
Leona Mitchell	Professor of Practice	Informatics and Networked Systems	Master's	University of Pittsburgh
Rebecca Morris	Teaching Assistant Professor	Information Culture and Data Stewardship	PhD	Unviersity of Pittsburgh
Danie Mosse	Professor	Computer Science	PhD	University of Maryland, College Park
Paul Munro	Associate Professor	Informatics and Networked Systems	PhD	Brown University
Balaji Palanisamy	Associate Professor	Informatics and Networked Systems	PhD	Georgia Institute of Technology
Konstantinos Pelechrinis	Associate Professor	Informatics and Networked Systems	PhD	University of California, Riverside
Robert Perkoski	Assistant Professor	Informatics and Networked Systems	PhD	University of Pittsburgh
Vinicius Petrucci	Lecturer	Computer Science	PhD	Fluminense Federal University, Brazil
Kirk R. Pruhs	Professor	Computer Science	PhD	University of Wisconsin-Madison
John C. Ramirez	Senior Lecturer	Computer Science	PhD	University of Pittsburgh
Marcia Rapchak	Lecturer	Information Culture and Data Stewardship	Ed.D.	Duquesne University

Song Shi	Visiting Assistant Professor		PhD	University of Massachusetts, Amherst
Xulong Tang	Assistant Professor	Computer Science	PhD	Pennsylvania State University
David Tipper	Professor	Informatics and Networked Systems	PhD	University of Arizona
Erin Walker	Associate Professor	Computer Science	PhD	Carnegie Mellon University
Martin Weiss	Professor	Informatics and Networked Systems	PhD	Carnegie Mellon University
Lingfei Wu	Assistant Professor	Informatics and Networked Systems/Information Culture and Data Stewardship	PhD	City University of Hong Kong
Joseph Yurko	Teaching Assistant Professor	School of Computing and Information	PhD	Massachusetts Institute of Technology
Vladimir Zadorozhny	Associate Professor	Informatics and Networked Systems	PhD	Russian Academy of Sciences, Moscow
Youtao Zhang	Associate Professor	Computer Science	PhD	University of Arizona
Taieb Znati	Professor	Computer Science	PhD	Michigan State University

School of Dental Medicine

The University of Pittsburgh Dental Hygiene Program provides a comprehensive education in both the basic sciences and clinical dental hygiene over the course of a two-year (six consecutive terms) Associate of Science Degree in Dental Hygiene. The University of Pittsburgh Dental Hygiene Program differs from other programs by providing a broader range of experiences in specialty clinics within the School of Dental Medicine, as well as clinical rotations at the University of Pittsburgh Medical Center. The major areas of focus are teaching, research, patient treatment, and community service. Dental hygiene services are rendered to a varied patient population, including pediatric, geriatric, physically and mentally challenged, and immunocompromised individuals. In addition to clinical practice, graduates are prepared for careers in areas such as education, research, and dental public health.

Students who complete the Dental Hygiene Program Associate of Science Degree in Dental Hygiene have the option of completing a Bachelor of Science degree offered through the College of General Studies. The degree completion option includes three areas of study focusing on a student's specific career goals. These areas include dental hygiene education, research, and health management. Graduates can work as licensed dental hygienists while completing their requirements for the bachelor's degree. Classes are tailored to the student's interests and can be arranged around work schedules. The program provides a firm foundation for those desiring to pursue graduate studies. (See the College of General Studies listing for more information on the Bachelor of Science degree completion option.)

Contact Information

University of Pittsburgh
School of Dental Medicine
Director, Dental Hygiene Program
B-82 Salk Hall Pittsburgh, PA 15261-1937
412-648-8432
krw79@pitt.edu
http://dental.pitt.edu/students/dental-hygiene-program

Admission Requirements and Deadlines: Associate of Science Degree in Dental Hygiene

(See Dental Hygiene Program listing under the Application for Admission section at the front of this bulletin for requirements and deadlines.)

Academic Standards: Professional/Ethical Conduct Statement for Students

Students will be evaluated on all aspects of professional behavior and ethical conduct. The evaluation will encompass criteria such as the student's interpersonal interaction with faculty, supervisors, staff, patients, and peers, as well as how the student completes all clinical and didactic assignments within scheduled deadlines and in keeping with both the quality and standards established by the Dental Hygiene Program, School of Dental Medicine faculty, and the University of Pittsburgh faculty. Additionally, student compliance with all established policies and procedures will be evaluated when considering student promotion and board eligibility.

Grading

Each dental hygiene course instructor will clearly state his/her policy regarding grades and evaluation at the beginning of the course. A course syllabus will be distributed to all students at the first class meeting. All required courses are graded according to the University's letter grade system (see Grading and Records section of this bulletin). Elective courses beyond the required number may be taken with the permission of the program director. Student advising begins with the faculty responsible for the course. It is the student's responsibility to seek assistance from the faculty in any course in which the student has a grade lower than a C.

Bachelor of Science Degree Completion Program

Students who complete this program also have the option and are encouraged to complete a Bachelor of Science in dental hygiene as offered by the College of General Studies (see College of General Studies listing for information on BS degree completion option and additional dental hygiene courses which must be taken for the BS).

School of Dental Medicine/Dental Hygiene Program Faculty

Full-Time Faculty

Elizabeth Ban, *Instructor*, RDH, BS, University of Pittsburgh

Jennifer Debski, *Instructor*, RDH, BS, University of Pittsburgh

Victoria Folino Gallo, *Instructor*, RDH, MBA, Waynesburg University

Matthew Jarembek, *Instructor*, RDH, MS, State University of New York

Candice Kieffer, *Instructor*, RDH, MS, University of California

Faith Mahan, *Instructor*, RDH, BS, University of Pittsburgh

Kelly Wagner, *Assistant Professor*, *Director*, *Dental Hygiene Program*, RDH, MS, University of Maryland

Part-Time Faculty

Antonia Ambrosino, *Instructor*, RDH, BS, University of Pittsburgh

Gayle L. Ball, *Assistant Professor*, RDH, MA, Antioch University

Susan Ban, *Clinical Instructor*, RDH, BS, University of Pittsburgh

Victoria Green, *Instructor*, RDH, MEd, University of Pittsburgh

Jeong-Seon Kim, *Clinical Instructor*, PhD, Washington State University

RDH, DMD, University of Pittsburgh

Program and Course Offerings

Dental Hygiene Program

Major

Associate of Science Degree in Dental Hygiene

Associate of Science Degree in Dental Hygiene Requirements

For a complete list of the required courses, please refer to the program curriculum. Upon successful completion of the course requirements, the student is eligible to take the Dental Hygiene National Board and the Commission on Dental Competency Assessment Examinations and apply for state licensure.

Program Curriculum

First Term

- DENHYG 1110 - BIOLOGICAL SCIENCES 1
- DENHYG 1112 - INTRODUCTION TO DENTAL HYGIENE
- DENHYG 1113 - INTRODUCTION TO DENTISTRY
- DENHYG 1114 - DENTAL ANATOMY
- DENHYG 1116 - DENTAL HYGIENE PRECLINIC
- DENHYG 1117 - CHEMISTRY, BIOCHEMISTRY AND NUTRITION

Credits: 17

Second Term

- DENHYG 1241 - PRINCIPLES OF MICROBIOLOGY
- NUR 0032 - MICROBIOLOGY LABORATORY
- DENHYG 1242 - BIOLOGICAL SCIENCES 2
- DENHYG 1244 - COMMUNICATIONS
- DENHYG 1245 - DENTAL HYGIENE RADIOLOGY 1
- DENHYG 1247 - DENTAL HYGIENE SEMINAR 1
- DENHYG 1248 - DENTAL MATERIALS
- DENHYG 1249 - DENTAL HYGIENE CLINIC 1

Credits: 17

Third Term

- DENHYG 1370 - INTRODUCTION TO CLINICAL PERIODONTICS
- DENHYG 1372 - GENERAL AND ORAL PATHOLOGY
- DENHYG 1373 - BIOLOGICAL SCIENCES 3
- DENHYG 1375 - ANESTHESIA FOR DENTAL HYGIENIST
- DENHYG 1376 - DENTAL HYGIENE RADIOLOGY 2
- DENHYG 1377 - DENTAL HYGIENE SEMINAR 2
- DENHYG 1379 - DENTAL HYGIENE CLINIC 2

Credits: 16

Fourth Term

- DENHYG 1411 - DENTAL PHARMACOLOGY
- DENHYG 1412 - PUBLIC HEALTH DENTISTRY
- DENHYG 1417 - DENTAL HYGIENE SEMINAR 3
- DENHYG 1419 - DENTAL HYGIENE CLINIC 3
- DENHYG 1420 - ETHICS HEALTH CARE PROFESSIONAL
- DENHYG 1421 - SPECIAL NEEDS DENTISTRY
- DENHYG 1422 - HEALTH PROMOTIONS THROUGH THE LIFE SPAN

Credits: 17

Fifth Term

- DENHYG 1544 - INTRODUCTION TO RESEARCH ANALYSIS
- DENHYG 1545 - DENTAL HEALTH EDUCATION, METHODS AND PRACTICUM
- DENHYG 1547 - DENTAL HYGIENE SEMINAR 4
- DENHYG 1549 - DENTAL HYGIENE CLINIC 4

Credits: 13

Sixth Term

- DENHYG 1689 - ADVANCED CLINICAL DENTAL HYGIENE PRACTICE
- ADVANCED DENTAL HYGIENE PRACTICUM - 0 Cr. (Taken within DENHYG 1689)

Credits: 2

Total: 82

Department of Diagnostic Services

Department of Oral Biology

School of Education

Mission/Vision

The following statement is the Mission/Vision of the School Education, adopted January 2019. It encapsulates what we do, what we believe, and who we continually seek to become as members of the School community.

We ignite learning. We strive for well-being for all. We teach. We commit to student, family, and community success. We commit to educational equity. We advocate. We work for justice. We cultivate relationships. We forge engaged partnerships. We collaborate. We learn with and from communities. We innovate and agitate. We pursue and produce knowledge. We research. We disrupt and transform inequitable educational structures. We approach learning as intertwined with health, wellness, and human development. We address how national, global, social, and technological change impacts learning. We shape practice and policy. We teach with and for dignity. We think. We dream. We lead with integrity. We are the School of Education at the University of Pittsburgh.

General Information

The School of Education (www.education.pitt.edu) is organized into four academic departments:

- Department of Administrative and Policy Studies
- Department of Health and Physical Activity
- Department of Instruction and Learning
- Department of Psychology in Education

Undergraduate degree programs are offered in the Department of Health and Physical Activity (HPA) and the Department of Psychology in Education (PSYED). HPA offers the baccalaureate program in health and physical activity with specializations in exercise science and wellness; PSYED offers the baccalaureate program in applied developmental psychology.

Teacher certification programs are offered in the Department of Instruction and Learning at the graduate level only. No teacher certification programs are offered in the other three departments.

Undergraduate students interested in obtaining teacher certification at the University of Pittsburgh after they have earned their baccalaureate degrees are encouraged to contact the pre-admissions advisors in the School of Education early in their undergraduate programs in order to obtain information about the teacher certification programs available and the requirements of those programs. Admission for teacher certification study requires that applicants have completed liberal studies distribution requirements in the humanities, natural sciences, and social sciences, as well as course work in an academic major field or content area. Additionally, applicants to the Professional Year (PY) Program are expected to have completed preprofessional education courses (e.g., courses emphasizing human development and learning, the study of schools and society, and an introduction to the teaching seminar in the intended certification area). The number of credits and specific courses required vary by type and area of certification. Note, however, that all applicants to both the PY Program and the Master of Arts in Teaching (MAT) Program must have at least 6 credits or the equivalent in college-level mathematics, at least 3 credits or the equivalent in college-level English composition, and at least 3 credits or the equivalent in college-level American and/or British literature. For admission to teacher certification programs in the Department of Instruction and Learning, all students must have taken and passed the Praxis I Series of Tests, which includes reading, mathematics, and writing. As a point of general information, most students admitted to the PY and MAT programs have undergraduate grade point averages (GPAs) of at least 3.0. Specific information may be obtained from the Office of Admissions and Enrollment Services, 5500 Wesley W. Posvar Hall, 412-648-2230, soeinfo@pitt.edu.

Admissions

The School of Education does not admit students to its undergraduate programs at the freshman level. Therefore, students must first be admitted to another school at the University of Pittsburgh or to another institution.

If an applicant to a School of Education undergraduate program is currently a University of Pittsburgh student, the applicant should contact the dean's office of the school to which the applicant has been admitted and request an Undergraduate Academic Program Change form. After completion of this form, all records will be transferred to the School of Education, Office of Admissions and Enrollment Services, 5500 Wesley W. Posvar Hall, for review.

If an applicant to a School of Education undergraduate program is transferring from another institution, the applicant should contact the Office of Admissions and Financial Aid, Alumni Hall, for a Transfer Application. (See Transfer Student Admissions section of this bulletin for more information.)

To be admitted into a Minor program in the School of Education a student must do the following:

- Be enrolled in an undergraduate program at the University of Pittsburgh.
- Complete a School of Education Admissions Application for the selected academic minor.

Advising

Each student admitted to an undergraduate program in the School of Education is assigned a faculty advisor.

Dean's List

Early each term, students whose grades in the previous grading period indicate outstanding achievement are recognized in the Dean's List.

Full-time students (those enrolled in 12 or more credits) who earned 12 credits in the preceding term (not including courses taken on the Satisfactory/Audit option) with a term GPA of at least 3.50 and no grade lower than a C are placed on the Dean's List.

Part-time students (those enrolled in fewer than 12 credits) who have earned 12 credits in the SOE in previous terms (not including courses taken on the Satisfactory/Audit option) with a QPA of at least 3.50 and no grade lower than a C are placed on the Dean's List.

Part-time students are evaluated for Dean's List recognition by determining if 12 credits of letter-graded coursework have been completed since the last Dean's List recognition. If 12 credits have been completed, the GPA for the terms in which the last 12 credits were completed is used to assess the Dean's List eligibility.

Degree Requirements

The undergraduate degree in the School of Education requires the satisfactory completion of a minimum of 120 credits of approved undergraduate study. Undergraduate degrees are conferred only on those students who have completed all courses required for the degree with a GPA of at least 2.50.

Students in the School of Education must complete at least 60 credits in courses offered at the University of Pittsburgh. They must be enrolled in the School of Education during the term the degree is awarded. Students who begin their study at the regional campuses must apply to relocate to the Pittsburgh campus for at least the last 60 credits.

Transfer Credits

With approval of faculty advisor and the Dean's designated administrator, the School of Education recommends transfer credits that meet University policy. The University will grant credit earned at other institutions based on course equivalencies, including expected learning outcomes, with those of the University curriculum and standards. In the School of Education, the maximum number of credits that can be transferred to the Bachelor Science degree is 60 credits. At the undergraduate level, no grade below C- may be transferred. Credits are only transferrable if they meet specific degree requirements. Current School of Education undergraduate students who wish to enroll at another institution with the intention of transferring credits to the University of Pittsburgh must receive prior approval from their advisor. See general Undergraduate Academic Regulations for more information.

Probation and Dismissal

All students enrolled in undergraduate programs in the School of Education are required to maintain a grade point average (GPA) of at least 2.50. The cumulative GPA is based on all course work taken after enrollment at the University of Pittsburgh. A student is automatically placed on academic probation when the cumulative GPA, exclusive of transfer credits, falls below 2.50.

Only letter grades with GPA values will be used to compute and determine academic probation status. While on probation students are limited to registering only for courses in which a letter grade is given. To be removed from probation status, a student must achieve a 3.00 GPA in 9 credits or more. A student can only be placed on academic probation status once during their program of study. Students placed on academic probation status will receive notification in the form of a letter from the School of Education, and they will be recommended to seek guidance from their academic advisor.

Ordinarily, students are required to terminate study after two terms on probation if there is no improvement in the quality of their work. A student

placed on academic probation status more than once is also required to terminate study. A student who does not meet the GPA or credit requirements will be dismissed from the School of Education, unless serious extenuating circumstances exist. The request for continuation must include a recommendation made by the Department Chair (or designated faculty member) and the academic advisor, with the recommendation approved by the Dean of the school.

School of Education Course Offerings

www.education.pitt.edu

School of Education Faculty

Program and Course Offerings

Department of Educational Foundations, Organization, and Policy

General Contact Information

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Email: jrussel@pitt.edu
Phone: 412-624-7489

Associate Chair: Mike Gunzenhauser
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Department Administrator, Mary Mollo
Department of Educational Foundations, Organization, and Policy
412-624-7881
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Department Address: 5900 Posvar Hall, 230 S. Bouquet St., Pittsburgh, PA 15260

Department of Teaching, Learning, and Leading

Contact Information

Associate Chair: Sheila Conway
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Department Address: 5900 Posvar Hall, 230 S. Bouquet St., Pittsburgh, PA 15260

Minor

Secondary Education Minor

To help undergraduate students explore the field of education and prepare for graduate work in education, the School of Education offers a flexible 15-credit Secondary Teacher Education minor. These courses allow students who plan to enter a graduate program in Secondary Teacher Education to make progress on the prerequisite education courses required for those programs and to earn an additional credential on their official transcripts.

Completion of the teacher education minor does not guarantee admission into the School of Education graduate programs; nor does it fulfill all necessary prerequisites.

Interesed students can apply by completing and submitting the online form for admission. Students can apply for the minor anytime during their undergraduate tenure.

Requirements

The Secondary Education Minor requires 15 undergraduate credits from the School of Education. A minimum of 6 credits must be from the Department of Instruction and Learning (IL).

- IL 1000 - INTRODUCTION TO TEACHING
- IL 1257 - TEACHING ENGLISH LANGUAGE LEARNERS (not recommended for future MAT degree students)
- IL 1505 - AUTISM: CHARACTERISTICS AND INTERVENTIONS
- IL 1580 - FOUNDATIONS OF SPECIAL EDUC (requires in-school observations)
- IL 1701 - EARLY FIELD EXPERIENCE-SECONDARY (requires in-school observations)
- IL 1704 - CURRENT ISSUES IN SECONDARY EDUCATION
- ADMPS 1001 - SOCIAL FOUNDATIONS OF EDUCATION
- EDUC 1011 - CULTURALLY RESPONSIVE PEDAGOGY
- PSYED 1001 - INTRO EDUCATIONAL PSYCHOLOGY

Department of Health and Human Development

Contact Information

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Associate Chair: Kelliann Davis
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Associate Chair: Elizabeth Nagle
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Department Address: 5900 Posvar Hall, 230 S. Bouquet St., Pittsburgh, PA 15260

Admission Requirements

ADP - Traditional Program

The program in applied developmental psychology uses a rolling admissions procedure which assures that all completed admission applications will be given regular review. Priority for admissions and financial aid decisions, however, will be given to those applications that are sent in by March 15, the recommended deadline for fall term admission.

In reviewing applications for admission, the Admissions Committee considers the following factors:

- Academic skill as evident on the student's transcript. The minimum acceptable GPA is 2.50;
- Documented evidence of experience and ability to work with children (experience may include volunteer work or employment);
- References, preferably from professionals familiar with the student's maturity, work habits, academic ability, and experience with children/youth; and
- Completion of 60 credits before the first term of enrollment in the program, including the following prerequisite courses, all of which should be taken for a letter grade:
    - English composition (3 credits);
    - Developmental psychology or equivalent (3 credits); and

- Other courses broadly distributed in the humanities, social sciences, and natural sciences.

Credits awarded from the College Level Examination Program (CLEP) by the College of General Studies are acceptable for inclusion in the 60 credits.

The program welcomes applications from junior and community college students and from students at other colleges and universities, including students from other countries. These students should see the Transfer Student Admissions or International Student Admissions sections of this bulletin for further details on applying. Students from other academic backgrounds should consult the program coordinator for evaluation.

ADP - CASE Teacher Certification Program

The program in ADP - CASE Teacher Certification admits student cohorts to begin the program each fall term. Applicants are reviewed in the spring of the term before the program begins. The application deadline is March 15.

In reviewing applications for admission, the Admissions Committee considers the following factors:

- Academic skill as evident on the student's transcript. The minimum acceptable 3.25;
- Documented evidence of experience and ability to work with children (experience may include volunteer work or employment);
- Three letters of reference, preferably from professionals familiar with the student's maturity, work habits, academic ability, and experience with children/youth; and
- Completion of 61 credits of CASE prerequisites before the first term of enrollment in the program. Prerequisite courses can be found on the ADP-CASE website.

The program welcomes applications from junior college and community college students and students at other colleges and universities, including students from other countries. These students should see the Transfer Student Admissions or International Student Admissions sections of this bulletin for further details on applying. Students from other academic backgrounds should consult the program coordinator for evaluation of prerequisites.

Contact Information

University of Pittsburgh
School of Education
Department of Health and Human Development
Trees Hall
Pittsburgh, PA 15260
412-648-8271
hpa@pitt.edu
www.education.pitt.edu

Admissions

Specific requirements for admission to the baccalaureate program in movement science are as follows:

- An application after approximately 45 credits have been completed: these credits should have been taken in courses that meet the general liberal arts and science requirement of the exercise science curriculum;
- A minimum GPA of 2.80 in the natural sciences;
- A demonstration of appropriate health-fitness behaviors as a statement of commitment to the basic philosophy of movement science;
- A statement of career goals and a self-evaluation; and
- Three letters of recommendation and possibly an interview.

Major

Applied Developmental Psychology, BS

The undergraduate major in Applied Developmental Psychology (ADP) develops the skills and knowledge needed for professional work in child and youth care, education and other related human service fields. ADP also prepares students for graduate school in such fields as education, psychology, and social work. Coursework includes developmental theory and research covering birth through early adulthood, professional issues, family dynamics, cultural distinctions, disabilities, psychopathology, curriculum and activity planning, practice skills, and supervision.

The undergraduate major in Applied Developmental Psychology (ADP) includes three distinct areas of concentration that lead to a BS degree:

- ADP Traditional
- ADP Practitioner
- ADP CASE (Combined Accelerated Studies in Education)

ADP- Traditional Program

The undergraduate major in Applied Developmental Psychology (ADP) emphasizes developing the skills necessary for implementing and evaluating effective programs for children, youth, and families. Course work includes the study of professional issues, program design and evaluation, counseling skills, and qualitative research methods. The program allows for a focus on Child Life hospital work, group care, family support and intervention, administration, play intervention and therapy. Successful completion of the program leads to the Bachelor of Science degree.

The ADP Bachelor of Science program is listed as an academic program to prepare Child Life Specialists by the Child Life Council.

The curriculum is organized into four terms of upper-division (junior and senior year) study. Applications for admission should be submitted during the sophomore year.

- PSYED 1002 - DEVELOPMENT: CONCEPTION THROUGH EARLY CHILDHOOD
- PSYED 1016 - DEVELOPMENT CURRICULUM AND ACTIVITIES
- PSYED 1025 - CONTEMPORARY ISSUES IN COMMUNITY
- PSYED 1007 - METHODS OF EVIDENCE-BASED PRACTICE
- PSYED 1089 - SPECIAL TOPICS
- PSYED 1013 - DEVELOPMENTAL PSYCHOPATHOLOGY
- PSYED 1024 - FAMILY DYNAMICS
- PSYED 1028 - DEVELOPMENTAL PRACTICE SEMINAR 1
- PSYED 1029 - DEVELOPMENTAL PRACTICE SEMINAR 2
- PSYED 1036 - DEVELOPMNTL MEANING CULTL DISTN
- PSYED 1042 - CHILD & YOUTH WORK PRACTICE 1
- PSYED 1043 - CHILD/YOUTH PRACTICE 2
- PSYED 1050 - SUPRVSN ADM CHLD YOUTH WRK SETNG

ADP- CASE Teacher Certification Program

The undergraduate major in Applied Developmental Psychology (ADP) also includes preliminary work in teacher certification. This program emphasizes developing the skills necessary for becoming a highly effective teacher of young children in grades PK-4 General Education and PK-21 Special Education. Course work includes the study of professional issues, program design and evaluation, teaching methodology and best practices in using culturally and linguistically relevant pedagogy. Successful completion of the program leads to the Bachelor of Science degree. CASE students then continue into the graduate year to complete coursework and student teaching that leads to the PK-4 Early Childhood and the PK-21 Special Education teaching certification in Pennsylvania.

The curriculum is organized into four terms of upper-division (junior and senior year) undergraduate study. Three additional terms of graduate study allows students to finish with two degrees and two teacher certifications in five years. Applications for admission should be submitted during the sophomore year.

- PSYED 1004 - ATTENTIONAL TEACHING PRACTICES
- PSYED 1002 - DEVELOPMENT: CONCEPTION THROUGH EARLY CHILDHOOD
- PSYED 1016 - DEVELOPMENT CURRICULUM AND ACTIVITIES
- PSYED 1036 - DEVELOPMNTL MEANING CULTL DISTN
- PSYED 1025 - CONTEMPORARY ISSUES IN COMMUNITY
- PSYED 1050 - SUPRVSN ADM CHLD YOUTH WRK SETNG
- PSYED 1005 - TEACHING GLOBALLY AND LOCALLY IN A DIVERSE WORLD
- IL 1562 - ASSESSMENT: YOUNG CHILDREN WITH DISABILITIES
- IL 1907 - COLLABORATIVE PARTNERSHIPS WITH FAMILIES AND THE COMMUNITIES
- IL 2511 - CURR PRG DVLP-LOW INCDNC DISABS
- IL 1580 - FOUNDATIONS OF SPECIAL EDUC
- IL 1563 - INCLUSION PRE-K
- IL 1047 - INTEGRATED CURRICULUM PRE-K - 4
- IL 1270 - INTEGRTG ART & MUSIC ELEM CLSSRM

- IL 1042 - LANGUAGE AND LITERATURE FOR THE YOUNG CHILD
- IL 1433 - MATH AND SCIENCE INSTRUCTION FOR YOUNG LEARNERS 1 (PRE-K-GRADE 4)
- IL 1434 - MATH AND SCIENCE METHODS 2 (PRE-K - GRADE 4)
- IL 1850 - LIFE SKILLS PRACTICUM
- IL 1800 - PRE-STUDENT TEACHING PRE-K
- IL 1208 - READING/WRITING METHODS 1: PRE-KINDERGARTEN - GRADE 1
- IL 1209 - READING/WRITING METHODS 2: GRADES 2-4
- IL 1852 - LIFE SKILLS PRACTICUM SEMINAR
- IL 1049 - SEMINAR RELATED TO PRE-STUDENT TEACHING PRE-K
- IL 1268 - SOCIAL STUDIES METHODS PRE-K - 4
- IL 1045 - YOUNG ENGLISH LANGUAGE LEARNERS
- HPA 1491 - TEACHING HEALTH AND WELLNESS IN ELEMENTARY SCHOOLS
- IL 1560 - EARLY EDUCATION OF YOUNG CHILDREN WITH DISABILITIES

Health and Physical Activity - Exercise Science, BS

Health and Physical Activity

The baccalaureate program in health and physical activity leads to the BS degree and provides specializations in exercise science and wellness. The exercise science specialization is offered for students interested in the study of human movement, independent of its implications for teaching physical education in traditional elementary and secondary school settings. Students are prepared for careers as health-related physical fitness specialists interested in working with adult populations in community, corporate, and private fitness centers. Also, this specialization provides basic academic and clinical studies for students wishing to pursue graduate work in exercise science.

The wellness specialization is offered for undergraduates interested in corporate wellness, exercise leadership and programming, public health, and coordination of health-fitness and wellness programs. Students are provided the opportunity for professional focus in one of four areas: aquatics, fitness, aerobics, or aerobics/fitness. This specialization provides appropriate mechanisms to meet the criteria for various professional certifications in this fastgrowing and competitive field. The wellness specialization provides basic academic and clinical studies for students wishing to pursue graduate work in physical activity or the public health domain.

Exercise Science Curriculum

All students in exercise science complete 50-52 credits of courses in liberal arts and sciences, distributed as follows:

- Communication skills (9 credits)
- Quantitative reasoning (6-7 credits)
- Humanities (9 credits)
- Sciences (17-18 credits)
- History, social science, and public policy issues (9 credits)

In addition, all students in exercise science complete the following core of 67-75 credits:

- Biophysical foundations (19 credits)
- Behavioral and sociocultural foundations (3 credits)
- Research methods and practicum (3-5 credits)
- Health and wellness foundations (7-9 credits)
- Natural Science Electives (14-16 credits)
- Exercise Science Foundations (22-23 credits)

This degree requires a clinical/field experience and a directed research and/or health and fitness practicum. These requirements are completed under the direct supervision of a faculty member and may occur in a variety of settings (e.g., health clubs and hospitals).

Exerise Science Requirements (70-73 CREDITS)

Biophysical Foundations (19 credits)

- HPA 1033 - HUMAN PHYSIOLOGY
- HPA 1011 - APPLIED HUMAN ANATOMY

- HPA 1012 - APPLIED HUMAN ANATOMY LAB
- HPA 1042 - PHYSIOLOGY OF EXERCISE
- HPA 1485 - NUTRITION AND HEALTH
- HPA 1044 - BIOMECHANICS
- HPA 1487 - CHRONIC DISEASE AND OBESITY

Behavioral & Sociocultural Foundations (3 credits)

- HPA 1486 - BEHAVIOR CHANGE STRATEGIES

Research Methods and Practicum (3-5 credits)

- HPA 1031 - RESEARCH IN SPORTS SCIENCE
- HPA 1045 - DIRECTED RESEARCH PRACTICUM

Health and Wellness Foundations (7 credits)

- HPA 0474 - LIFETIME ACTIVITIES 1
- HPA 0475 - LIFETIME ACTIVITES 2
- HPA 0196 - FIRST AID AND CPR
- HPA 1489 - CONSIDERATIONS FOR HEALTH AND FITNESS PROGRAMMING

Natural Science Electives (14-16 credits)

- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2
- CHEM 0120 - GENERAL CHEMISTRY 2
- SCIENCE ELECTIVES

Exercise Science Foundations (22-23 credits)

- HPA 1233 - PRINCIPLES OF STRENGTH AND CONDITIONING
- HPA 1224 - FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION
- HPA 1226 - ASSESSMENT AND PRESCRIPTION FOR SPECIAL POPULATIONS
- HPA 1035 - EXERCISE SCIENCE SEMINAR 2
- HPA 1996 - CLINICAL INTERNSHIP
- HPA 1169 - HEALTH FITNESS PRACTICUM 1
- HPA 1170 - HEALTH FITNESS PRACTICUM 2

Instructor Courses (2 credits) (Choose 2)

- HPA 1171 - RESISTANCE TRAINING INSTRUCTOR
- HPA 1172 - GROUP FITNESS INSTRUCTOR
- HPA 1173 - AEROBICS INSTRUCTOR
- HPA 1174 - YOGA AND PILATES INSTRUCTOR
- HPA 0497 - WATER SAFETY INSTRUCTOR
- PEDC 0243 - AMER RED CROSS FIRST/CPR INSTRC
- PEDC 0242 - AMER RED CROSS LIFEGUARD INSTRC

Minor

Applied Fitness Minor

Requirements

Students may minor in applied fitness, aquatics, dance, and exercise science. A minimum of 18 credits is required for each minor, with the exception of the applied fitness minor, for which a minimum of 17 credits is required. Upon completion of all requirements the minor will appear on the final transcript as an awarded Academic Minor. The student is responsible for working closely with their Minor Advisor to ensure that the necessary documentation is provided to allow for this to appear on the final transcript.

Graduates of the exercise science and wellness specializations and any minor programs do not qualify for public school teacher physical education certification.

APPLIED FITNESS REQUIRED COURSES (13 credits)

- HPA 1011 - APPLIED HUMAN ANATOMY
- HPA 1012 - APPLIED HUMAN ANATOMY LAB
- HPA 1033 - HUMAN PHYSIOLOGY
- HPA 1042 - PHYSIOLOGY OF EXERCISE
- HPA 1224 - FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION

APPLIED FITNESS MINOR FOUNDATION COURSES (1 CREDIT) Select 1 of the following:

- HPA 0474 - LIFETIME ACTIVITIES 1
- HPA 0475 - LIFETIME ACTIVITES 2

APPLIED FITNESS MINOR INSTRUCTOR COURSES (2 CREDITS) Select 2 of the following:

- HPA 1171 - RESISTANCE TRAINING INSTRUCTOR
- HPA 1172 - GROUP FITNESS INSTRUCTOR
- HPA 1173 - AEROBICS INSTRUCTOR
- HPA 1174 - YOGA AND PILATES INSTRUCTOR

APPLIED FITNESS MINOR PRACTICUM COURSE (1 CREDIT)

- HPA 1170 - HEALTH FITNESS PRACTICUM 2

Aquatics Minor

Requirements

Students may minor in applied fitness, aquatics, dance, and exercise science. A minimum of 18 credits is required for each minor, with the exception of the applied fitness minor, for which a minimum of 17 credits is required. Upon completion of all requirements the minor will appear on the final transcript as an awarded Academic Minor. The student is responsible for working closely with their Minor Advisor to ensure that the necessary documentation is provided to allow for this to appear on the final transcript.

Graduates of the exercise science and wellness specializations and any minor programs do not qualify for public school teacher physical education certification.

AQUATICS REQUIRED COURSES (15 CREDITS)

- HPA 0196 - FIRST AID AND CPR
- HPA 0497 - WATER SAFETY INSTRUCTOR

- HPA 1211 - ATHLETIC INJURY PREVENTION
- HPA 1212 - ATHLETIC INJURY PREVENTION LABORATORY
- HPA 1241 - TEACHING EXPERIENCE 1
- HPA 1242 - TEACHING EXPERIENCE 2
- HPA 1300 - NUTRITION IN EXERCISE AND SPORT
- PEDC 0133 - LIFE GUARDING 1
- PEDC 0242 - AMER RED CROSS LIFEGUARD INSTRC
- PEDC 0246 - POOL OPERATIONS/EVENT MANAGEMENT

Additional Aquatic Courses (3 CREDITS) Select 3 of the following:

- PEDC 0001 - BEGINNING SWIMMING
- PEDC 0002 - INTERMEDIATE SWIMMING
- PEDC 0026 - AQUATIC CONDITIONING
- PEDC 0158 - WEIGHT TRAINING - BEGINNER
- PEDC 0193 - PERSONAL FITNESS
- PEDC 0194 - SPORTS CONDITIONING
- PEDC 0211 - WATER FITNESS

Dance Minor

Requirements

Students may minor in applied fitness, aquatics, dance, and exercise science. A minimum of 18 credits is required for each minor, with the exception of the applied fitness minor, for which a minimum of 17 credits is required. Upon completion of all requirements the minor will appear on the final transcript as an awarded Academic Minor. The student is responsible for working closely with their Minor Advisor to ensure that the necessary documentation is provided to allow for this to appear on the final transcript.

Graduates of the exercise science and wellness specializations and any minor programs do not qualify for public school teacher physical education certification.

DANCE COURSES

- HPA 0060 - INTRODUCTION TO DANCE
- HPA 0473 - DANCE PEDAGOGY
- HPA 1241 - TEACHING EXPERIENCE 1
- HPA 1242 - TEACHING EXPERIENCE 2
- HPA 0033 - BALLET 1
- HPA 0041 - JAZZ 1
- HPA 0031 - MODERN DANCE 1
- HPA 0044 - DANCE PRODUCTION
- HPA 0040 - CHOREOGRAPHY
- HPA 0244 - DANCE PRODUCTION 2

Additional Dance Courses (Choose 3.0 credits from the following 4 courses)

- HPA 0196 - FIRST AID AND CPR
- HPA 0032 - MODERN DANCE 2
- HPA 0034 - BALLET 2
- HPA 0042 - JAZZ 2

Exercise Science Minor

Requirements

Students may minor in applied fitness, aquatics, dance, and exercise science. A minimum of 18 credits is required for each minor, with the exception of the applied fitness minor, for which a minimum of 17 credits is required. Upon completion of all requirements the minor will appear on the final transcript as an awarded Academic Minor. The student is responsible for working closely with their Minor Advisor to ensure that the necessary documentation is provided to allow for this to appear on the final transcript.

Graduates of the exercise science and wellness specializations and any minor programs do not qualify for public school teacher physical education certification.

EXERCISE SCIENCE MINOR REQUIRED COURSES (13 CREDITS)

- HPA 1011 - APPLIED HUMAN ANATOMY
- HPA 1012 - APPLIED HUMAN ANATOMY LAB
- HPA 1033 - HUMAN PHYSIOLOGY
- HPA 1042 - PHYSIOLOGY OF EXERCISE
- HPA 1224 - FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION

EXERCISE SCIENCE MINOR ELECTIVE COURSES (5-6 CREDITS) Choose from the following courses:

- HPA 1044 - BIOMECHANICS
- HPA 1233 - PRINCIPLES OF STRENGTH AND CONDITIONING
- HPA 1226 - ASSESSMENT AND PRESCRIPTION FOR SPECIAL POPULATIONS
- HPA 1487 - CHRONIC DISEASE AND OBESITY

Institute for Practice & Research in Education

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Swanson School of Engineering

The Swanson School of Engineering's undergraduate programs prepare students for entrance into a diverse spectrum of careers, providing both a strong, fundamental engineering education and a thorough understanding of the broader aspects of society. Students have an opportunity to participate in the highly successful Cooperative Engineering Education Program, an increasing number of study abroad opportunities, joint programs with the University Honors College, and a number of certificate programs. Students also have the option of earning a minor or a dual degree from various Dietrich School of Arts and Sciences programs. Minors may also be earned from the other Swanson School of Engineering undergraduate degree programs. The curricula provide sufficient flexibility to allow graduates to pursue careers in industry, government, or education, including programs in medicine, law, or business.

Full-time Bachelor of Science in Engineering degree programs are offered on the Pittsburgh campus in the following engineering disciplines: bioengineering, chemical, civil, computer, electrical, engineering science, environmental, industrial, materials science, and mechanical. Special interdisciplinary programs can be structured based upon individual student interest and ability through the engineering science program. The Cooperative Engineering Education Program, in which students alternate terms of relevant work experience with course work, is available for students in all undergraduates. Approximately half of the graduating seniors complete at least three co-op rotations. There are also certificate programs in nuclear engineering; innovation, product design and entrepreneurship; product realization; supply chain management; engineering for humanities; international engineering studies; engineering simulation in design; and sustainable engineering.

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Application Procedures

The Swanson School of Engineering works closely with the University of Pittsburgh's Office of Admissions and Financial Aid (OAFA). Ultimately, all admissions, financial aid and scholarship decisions take place through OAFA following the procedures detailed below:

First Year Engineering Applicants

All admissions to the Swanson School of Engineering are determined by the University's Office of Admissions and Financial Aid. (Please see Pittsburgh Campus Freshman Admissions section of this bulletin for details.) Approximately 550 first year students enter the Swanson School of Engineering each fall term.

Transfer Students from Other Colleges and Universities

The Swanson School of Engineering admits transfer students from within the University system, and from other U.S. and international programs. Approximately one-third of the students receiving the BSE degree transferred into the school. Transfer applicants are evaluated according to their academic record and potential for completing the particular engineering program, and conditional upon space available in the program of choice. An applicant for transfer to the Swanson School of Engineering from another college or university should apply through the Office of Admissions and Financial Aid.

Contact the First-Year Engineering Program at 412-624-9825 or see the transfer engineering student Web site for more information on transfer procedures.

A transfer applicant from a four-year college should have a grade point average (GPA) of at least a 3.000 (for courses that satisfy Swanson School of Engineering's first-year requirements) on a 4.000 scale to be considered for admissions. Applicants from a two-year college should have a minimum GPA of a 3.250 on a 4.000 scale. Students interested in the Bioengineering program from any institution (two-year or four-year) need a minimum of 3.500 GPA. Students must also have completed two semesters of Calculus, Calculus-based Physics and Chemistry for consideration. In general transfer students will only be accepted for the upcoming Fall Term except for special cases of well-prepared applicants.

All transfer applicants are required to provide SAT I critical reading and mathematics scores and high school academic records. Advanced standing credits will be granted for college course work at another accredited institution depending on grades received and on the relevance of the courses to the applicant's proposed program in the Swanson School of Engineering. Only courses in which the applicant received at least a C (2.000 on a 4.000 scale) will be considered for transfer and then only if the courses are applicable to their degree program.

Transfer Students from another University of Pittsburgh Oakland Campus School

Most transfer applicants from other Pittsburgh campus units to the Swanson School of Engineering come from either the Dietrich School of Arts and Sciences (DSAS) or the College of General Studies (CGS), although students from any of the University's other schools are eligible for transfer if they meet the Swanson School of Engineering's requirements. Students must submit a Program Change Form through their current advising or academic records center for transfer consideration.

An applicant for transfer from an Oakland campus school must have a minimum 3.000 cumulative GPA (3.500 for Bioengineering) and must have completed no fewer than 7 of the 8 First Year Engineering courses (MATH 0220 and 0230 - Analytic Geometry and Calculus 1 and 2; PHYS 0174 and 0175 - Physics for Science and Engineering 1 and 2; CHEM 0110 and 0120 - General Chemistry 1 and 2; and ENGR 0015 and 0016 Introduction to Engineering Analysis and Introduction to Engineering Computing) with a grade of "C" or better to be considered for admission. Completion of all transfer minimum requirements does not guarantee transfer, as space limitations within each degree program will be considered. For additional information, see the transfer engineering student Web site.

The GPA for students transferring into the Swanson School of Engineering from another school or campus within the University will be recalculated in accordance with the Swanson School of Engineering's policy.

Regional Campus Students

Request forms for relocation from the Bradford, Greensburg, Johnstown, or Titusville campuses are available at each regional campus. Pre-engineering students who have a grade point average of 3.000 or higher (with the exception of bioengineering, which requires a 3.500 GPA) in the required first year engineering curricula are eligible to relocate pending departmental approval. Completion of all transfer minimum requirements does not guarantee transfer, as space limitations within each major will be considered. Students from the Bradford campus in Chemical, Civil, Computer, Electrical and Mechanical must complete the first-two years of their degree program before applying to transfer to the Oakland campus.

Consistent with our admissions deadlines with the Office of Admissions and Financial Aid, we will not be able to consider Regional Campus transfer students for the Spring semester if required engineering curricula course grades are in process during the applicant's Fall term. Exceptions to this rule must be approved in advance by the Associate Dean for Academic Affairs.

Advanced Standing / Transfer Credit for Courses Taken Outside the University

Students transferring into the Swanson School of Engineering from other college-level programs will have their academic records officially reviewed for advanced-standing credit only after they have been admitted and pay their tuition deposit. This determination will be made by the responsible academic department or program in accord with Swanson School of Engineering's policy and criteria established by ABET, the engineering accrediting agency. Advanced standing for engineering or engineering science courses will be considered only if the student completed the course and earned a grade of C or better. Courses that are taken on a pass/fail system that includes a D grade as passing will not be approved for advanced standing. Advanced standing for mathematics, science, humanities, and social sciences courses will be awarded to the extent that such courses match specific University of Pittsburgh Dietrich School of Arts and Sciences courses as required by the Swanson School of Engineering. In particular, humanities and social sciences courses must correspond to those on the Swanson School of Engineering's approved list of humanities and social sciences electives. Contact the Swanson School for information on these approved electives. Additionally, Writing Designated courses ("W" Courses) may not be transferred in from another institution.

Additional transfer credit policies are as follows:

1. All courses that have equivalent counterparts at Pitt in terms of content and credits in the Swanson School of Engineering curriculum are eligible for transfer.
2. No transfer credits can be part of the final 30 required for a degree. These must be earned in residence. In interpreting this regulation, credits earned on regional campuses are considered as transferable.
3. Transfer credits need to be earned within 12 years of the date when the Swanson School of Engineering degree requirements will be completed.
4. In accordance with University policy, re-evaluation of credits will be done by the admitting school, when necessary, according to applicable University policy and procedure. The policy applies to all previous credits earned, no matter if they were earned at the University of Pittsburgh or another institution.
5. No more than 60 credits may be transferred from a two-year college. No more than 90 may be transferred from a four-year college.
6. If a course for which advanced standing credit has been granted is repeated, the advanced standing credit is canceled.
7. Coursework earned in approved foreign study programs will be awarded on a Satisfactory/No Credit (S/NC) basis, assuming a grade of C or better has been earned.
8. One credit taken at a quarter system school is equal to two-thirds a credit at the University of Pittsburgh. This may affect the ability of a course to transfer.
9. Engineering courses must be completed at an ABET certified institution with the exception of approved study abroad courses.
10. The Swanson School of Engineering does not accept CLEP credit for course credits.

Credits for students transferring from a college that has a 3/2 program articulation agreement with the Swanson School of Engineering (see Combined Liberal Arts-Engineering 3/2 Program), a community college having an articulation agreement with the Swanson School of Engineering, or a pre-engineering program at a University of Pittsburgh regional campus will be accepted in accord with those agreements, University policy, and available space in the program of interest.

If a student participates in the University of Pittsburgh College in High School Program, grades earned in Pitt CHS courses appear on an official University of Pittsburgh transcript and are part of the student's academic record. The grade(s) will be included in the calculation of the student's grade point average at the University. CHS courses are only eligible to be repeated at the University if the original grade was below C and no more than one year has passed since the original course was taken, per the Swanson School of Engineering Course Repeat policy.

Students enrolled in the Swanson School of Engineering may take courses at other universities to satisfy graduation requirements only if the student's academic advisor or undergraduate coordinator has approved those courses in advance. Such courses must be taken at colleges or universities that offer full four-year degree programs. Students must earn a grade of C or higher for the course to be accepted for transfer credit. Students must arrange for their transcript to be sent to their undergraduate coordinator.

Students may also earn advanced standing credit by taking Advanced Placement or International Baccalaureate classes in their high schools. Students who have their AP or IB scores sent to the University of Pittsburgh will have those scores evaluated by an academic advisor, who will determine their transferability.

For more information on the IB, see the IB Score Information. For more information on the AP, see the AP Score Information.

Summer/Special Session Courses Taken Elsewhere*

Swanson School students in good academic standing (cumulative GPA of at least 2.000) may attend a summer or special session of another accredited institution in order to supplement their program, provided they receive prior approval from their academic advisor in the Swanson School of Engineering. Swanson School students may not be enrolled for classes at the University of Pittsburgh and another institution concurrently. Students must submit the name of the institution, the course number, and the relevant course descriptions to their advisor. Courses may not be a repeat of any course taken (passed or failed) before unless an exception is made by the undergraduate coordinator. A maximum of two courses (no more than 8 credits) may be taken in a single period of enrollment elsewhere.

Students who wish to take "winter term" (e.g. "wintermester", "January-term") courses at another institution must obtain the approval of the Associate Dean through their Academic Advisor/Undergraduate Coordinator. Math, science, and engineering courses will not be approved winter term courses. The winter term in question may not overlap with Pitt's fall or spring term.

** On 10/14/2020 the following information was updated in the published catalog. In an effort to provide accurate information the update was made on 10/15/2020.*

Interdepartmental Transfers

A Swanson School of Engineering student whose academic record satisfies the minimum requirements for continued registration may apply for transfer from one engineering department or program to another. To initiate a change of program status, the student must complete a Program Change form, available at the Swanson School of Engineering Office of Administration. It is the prerogative of the department or program to which the student desires to transfer to approve or reject a change-of-status transfer request, based on academic performance and/or space limitations/availability.

Reinstatement

An engineering student in good academic standing who has not attended the University of Pittsburgh for three consecutive terms and has attended no other institution in the intervening period will be considered for reinstatement after making application to the department chair or program director. If the student has attended another institution and completed more than 12 credits, the student must reapply through the University's Office of Admissions and Financial Aid in accordance with the procedure for transfer applicants from other colleges or universities.

A student who has withdrawn while on academic probation may be reinstated only by action of the appropriate faculty committee, typically based upon substantial evidence of a positive change in the student's attitude toward academic work. The student must initiate the request for reinstatement with the appropriate department chair or program director/head.

Grading Policies

The following section details the Swanson School of Engineering's regulations regarding some of the grades that may appear on a student's transcript. (For a complete discussion of all grades and grading options, see the Grading and Records section of this bulletin.)

G Grade (Incomplete)

An instructor may give the G grade when a student is unable to complete the work of a course during the term because of extenuating personal circumstances. When given a "G" grade, you are usually instructed to complete some clearly defined work (e.g. a final examination paper) within the next term of registration or within the time specified by the instructor (no later than one year than one year after the term or session in which the course was taken). Upon completion of the course work, the instructor of the course will complete a Grade Change Authorization form and send it to the Swanson School of Engineering Office of Administration for processing. A student should not request or be given a "G" grade if, in actuality, the student will need to repeat the course. Once the deadline has passed, the "G" grade will automatically change to "NG" and will no longer appear as "in progress" on a student record. The "NG" grade will remain on the record and the student will be required to re-register for the course if it is needed to fulfill requirements for graduation.

Students may not move forward in a course sequence until G grades in previous classes in the same sequences have been changed to a letter grade, indicating that all work has been completed and the previous course requirements have been satisfied. Students who register for subsequent classes in a course sequence anticipating completion of the previous course are responsible to drop such classes if a G grade is assigned. Students may only enroll in the next class after outstanding work is completed.

S/NC Option

With the exception of undergraduate seminar courses, which are only offered satisfactory/no-credit (S/NC), the S/NC option cannot be used for any course that is used to meet graduation requirements. All other Swanson School of Engineering courses are only offered on a letter grade basis. This restriction includes humanities/social science electives and other science/engineering electives. First-Year Students may not elect to take courses under the S/NC option. Upper-class engineering students may elect to take non-engineering courses that will not be used to meet graduation requirements as S/NC. Because S/NC courses are not considered in the calculation of the grade point average, the option is appropriate for students wishing to explore disciplines they might not otherwise pursue because of potential negative impact on the grade point average.

A student who wishes to take a course under the S/NC option should first consult his/her advisor to assure that the S/NC option is permissible. A student must register for and complete at least one course for a letter grade to be eligible for an S/NC option course in any term. To register for more than one S/NC option course per term, and a maximum of two, a student must register for 12 or more credits for letter grades.

Calculation of the Grade Point Average

Each credit carried for a letter grade is awarded quality points as noted under the Grading and Records section of this bulletin. A student's term grade point average (term GPA) is the total quality points earned for the term divided by the total credits assigned letter grades. The cumulative grade point average (cumulative GPA) is determined by dividing the total number of quality points by the total number of credits assigned letter grades. Only credits and quality points for courses taken at the University of Pittsburgh and that count toward the requirement for the BSE degree are used in the calculation of the GPA.

Repeating Courses

A Swanson School of Engineering student may wish to repeat a course or may be required to repeat a course to fulfill degree requirements. Students should note:

- A student may only repeat a course twice.
- A student's third attempt must be approved by the undergraduate coordinator.
- A student who fails to successfully complete a required course after three attempts will be dismissed from the Swanson School of Engineering even if the student's GPA is 2.000 or higher.
- If a student wants to repeat a course in which they earned a C or above, the student must receive permission from their undergraduate coordinator.
- No sequence course may be repeated for credit after a more advanced course in that sequence has been passed with a C or higher grade.

Course repeats must be completed at the University of Pittsburgh unless approved by the undergraduate coordinator.

A grade replacement may be possible in some situations; refer to the Grade Replacement section below for more details.

Grade Replacement for Repeated Courses

A grade replacement and GPA recalculation occurs for a Swanson School of Engineering student who repeats a course in which they have earned below a C and repeats the course within one year of the original registration.

- No course may be repeated at any other institution and have that grade accepted as a replacement for the original grade earned at the University of Pittsburgh.
- The original course and grade remain on the transcript and/or the academic record; however, the grade and credits originally earned are not counted in the calculation of the QPA (prior to Fall term 2005) or the GPA. All grades earned when repeating a course will be posted and recalculated into the academic transcript, even if the student earns a lower grade than the prior attempt.
- The repeated course does not increase the number of credits counted toward meeting the degree requirements unless an F is replaced by a passing grade.
- W, R, N, or NC grades reported for the repeated course will not be identified as a course repeat, thus the original grade earned will continue to be counted in the QPA (prior to Fall term 2005) or GPA. Incomplete (G or I) grades will not be identified as repeated courses until the course work is completed.
- A sequence course cannot have the grade replaced if a succeeding course in that sequence has been taken (e.g., MATH 0220, 0230, and 0240 Analytic Geometry and Calculus 1, 2, and 3; PHYS 0174 and 0175 Basic Physics for Science and Engineering 1 and 2).
- Course number and title must match for the grade replacement to occur unless an exception has been made by the associate dean for academic affairs. Exceptions should be discussed with your advisor or undergraduate coordinator.
- The same course repeat and grade replacement rules will apply to transfer students from other schools within the University of Pittsburgh and the regional campuses.

Academic Standing

Swanson School of Engineering Term Warning and Swanson School of Engineering Probation:

To be considered in good academic standing, a student's cumulative grade point average (GPA) must be at least 2.000, AND the student must be making satisfactory progress toward earning an engineering degree. More information on Satisfactory Academic Progress standards can be found at https://oafa.pitt.edu/financialaid/satisfactory-academic-progress/. The policy for students determined to be in jeopardy of not maintaining good academic standing is:

Swanson School of Engineering Term Warning (One time only):

A student who earns a term GPA less than 2.000, but has a cumulative GPA still greater than or equal to 2.000 will receive a warning letter from the Swanson School of Engineering that he/she is in academic difficulty. The letter will state that the student is potentially subject to probation, suspension or dismissal if academic performance does not improve. The student is still considered to be in good academic standing.

Swanson School of Engineering Probation:

Engineering students will be placed on School Probation if:
1. The student meets two consecutive semesters at full time status where his/her Term GPA is less than 2.000, but his/her Cumulative GPA is still greater than or equal to 2.000 or
2. The student fails a course for the second time.

Participation in activities such as the Co-op Program or the International Program is at the discretion of the Associate Dean for Academic Affairs.

Additional Notes on University of Pittsburgh Academic Probation/Suspension/Dismissal for SSOE Students

- Students who have fallen below the standard pace of completion (67%) and/or have surpassed the maximum time frame may be subject to dismissal by the Swanson School of Engineering. Each case is evaluated on an individual basis by the Associate Dean for Academic Affairs office.
- A student who is not in good academic standing will be placed on academic probation and may be subject to suspension or dismissal if his or her cumulative GPA remains below a 2.000 for two consecutive terms (with the exception of first year students). Every engineering student's academic record is reviewed at the end of each term to certify whether or not the student is in good academic standing. Students will be notified by letter if they are no longer in good academic standing and are on probation, suspension or dismissal.
- Students in the First Year Engineering Program who enter in the fall term may be suspended or dismissed from the Swanson School of Engineering if they do not attain a cumulative GPA of 1.750 or greater by the end of the Spring Term. Typical first term engineering courses are MATH 0220, PHYS 0174, CHEM 0960, AND ENGR 0011 or their equivalents. Furthermore, First Year Engineering students with cumulative GPA's between 1.750 and 1.999 by the end of their first academic year who fail to obtain a cumulative GPA of 2.000 by the end of their third term are subject to suspension or dismissal. A similar time line will apply to students who begin the First Year Engineering program in the spring term.
- After being suspended, students are not eligible to re-enroll for one calendar year, after which they are required to apply for reinstatement through the Swanson School of Engineering Office of Administration. Students returning from academic suspension are reinstated on academic probation and their academic performance will be reviewed after each subsequent term.
- If the student's cumulative GPA remains below 2.000 for two consecutive terms, s/he will be subject to dismissal.
- Students may only repeat a course twice. Any student who fails to successfully complete a required course three times will be dismissed from the Swanson School even if his or her cumulative GPA is 2.000 or higher. Students dismissed from the Swanson School of Engineering who wish to enroll at another school/college at the University of Pittsburgh are subject to the admission requirements for that school.

Students should review the University of Pittsburgh's official policy on Academic Probation/Suspension/Dismissal, which is found at https://www.cfo.pitt.edu/policies/policy/09/09-01-10.html.

Honors Lists

At the end of each term, the academic records of all undergraduate degree students in the Swanson School of Engineering are reviewed to determine eligibility for the Term Honor List and the Dean's Honor List. Students who qualify for both honor lists will appear only on the Dean's Honor List.

Term Honor List

To be eligible for the Term Honor List, a student must

- Earn a GPA of at least 3.250,
- Complete a minimum of 15 credits of academic work for letter grades at the University of Pittsburgh, and
- Complete a minimum of 6 credits of work for letter grades in the term of eligibility.

Dean's Honor List

To be eligible for the Dean's Honor List, a student must

- Earn cumulative and term GPA's of 3.250 or higher,
- Complete a minimum of 30 credits of academic work for letter grades at the University of Pittsburgh, and

- Complete a minimum of 6 credits of work for letter grades in the term of eligibility.

Late Withdrawal Policy

Between the end of the University's stated add/drop period (approximately the third week of the fall and spring terms) until the last day of the monitored withdrawal period (approximately the ninth week of the academic term for fall and spring terms), a student may withdraw from any Swanson School of Engineering course for any reason. The academic dean or designate will approve the course withdrawal (the instructor's approval is not required).

After the end of the monitored withdrawal period, students will only be withdrawn from courses with the permission of the associate dean for academic affairs. Withdrawals will be approved only for documented exceptional reasons including medical or personal incidents that preclude the student from continuing with and/or completing his/her studies. In those cases the student must withdraw from all courses. Withdrawals from a specific course outside the Swanson School of Engineering must be arranged through the dean's office of the unit offering the course. Note that a withdrawal cannot be processed after grades have posted and students should seek withdrawals prior to final exams.

Credits

In the Swanson School of Engineering, a credit or credit hour is one of the following:

- One hour of lecture or recitation a week, requiring two hours of outside preparation
- Two hours of laboratory a week, requiring one hour of outside preparation
- Three hours of laboratory a week, requiring no outside preparation

Registration

Each student registers for future terms with the assistance of his or her academic advisor during registration periods specified by the Office of the University Registrar. A student who has registered for a course but has failed to satisfy the prerequisites for that course prior to the beginning of the term may not be permitted to continue attending class and must withdraw from the course if requested to do so. First Year engineering students register for the fall term during the summer advising sessions. All entering students are required to take the ALEKS Math placement exam before registering for their first Math class at the University of Pittsburgh, regardless of advanced standing credit (AP, IB, transfer credit) or prior ALEKS experience.

Maximum Credit Registration

All full-time undergraduate engineering students are expected to register for a normal full term of academic courses (i.e., at least 12 credits). No student shall be allowed to register for more than 18 credits without specific written permission from his/her academic advisor and approval by the Associate Dean for Academic Affairs. Such permission is given only after a review of the student's academic record in order to verify that an overload is academically justifiable. All credits above 18 for undergraduates will be billed over and above the full-time tuition rate at the prevailing per-credit tuition charge.

Registration for Graduate Credit

A Swanson School of Engineering undergraduate student requiring fewer than 15 credits to complete the requirements for the baccalaureate degree and who intends to continue study toward an advanced degree may be permitted during their final term to register for graduate courses that will later apply toward a graduate degree. The student must obtain written permission from the school of proposed graduate study that the courses may count when and if the student is admitted into the graduate program. Although these credits will appear on the undergraduate transcript, they will not count toward fulfilling undergraduate degree requirements. They will be posted as advanced standing credits on the graduate record.

Statute of Limitations

All required academic work for the Bachelor of Science in Engineering degree, including courses for which advanced-standing credit has been granted, must be completed within 12 consecutive calendar years. Under unusual circumstances, a student may, with the approval of the department or program chair, request a waiver of this policy. This policy means that part-time students must progress toward the degree at a minimum rate of 12 credits per calendar year.

Graduation Requirements

In order to graduate with a BSE, a student must have satisfactorily completed all degree requirements and earned the total number of credits required by the department or program in which the student is enrolled. The student must also have obtained a minimum GPA of 2.000 for (a) all required courses completed at the University of Pittsburgh and (b) all program courses.

The work of the senior year (a minimum of 24 credits) should be completed while in residence at the Swanson School of Engineering. Exceptions will be granted for students to take a limited number of credits needed to complete their degree, or through participation in an approved study abroad program. Such requests must be approved in advance by the appropriate undergraduate coordinator, chair or Associate Dean for Academic Affairs.

(See the Graduation section of this catalog for further information on graduation requirements and procedures.)

Academic Integrity and Code of Conduct*

The integrity of the academic process requires fair and impartial evaluation on the part of faculty and honest academic conduct on the part of students. Students are expected to conduct themselves with a high level of responsibility in the fulfillment of their course of study and their conduct in and out of the classroom. Violations of the Academic Integrity Policy can impact a student's grade or status with the University as some serious or subsequent violations could lead to suspension or dismissal. Academic Integrity violations can also affect a student's eligibility for scholarships. It is the corresponding responsibility of faculty to make clear to students those standards by which they will be evaluated and the resources permissible for use by students during their course of study. The educational process is perceived as a joint faculty-student enterprise that will involve professional judgment by faculty and may involve, without penalty, reasoned exception by students to the data or views offered by faculty. Consistent with these considerations (and without limiting their scope and application in their entirety to the academic programs of the University), faculty and students are directed to observe established University of Pittsburgh and Swanson School of Engineering guidelines on academic integrity and the University Code of Conduct. The Swanson School of Engineering and the University of Pittsburgh Guidelines on Academic Integrity are available to faculty and students in the departmental offices of the Swanson School of Engineering and is also available at Policy Guidelines - SSOE. The University's student Code of Conduct is available at: http://www.studentaffairs.pitt.edu/wp-content/uploads/2016/11/2016_Code_of_Conduct_Nov4.pdf

**On 10/5/2020 the following information was updated in the published catalog. In an effort to provide accurate information the update was made on 10/20/2020.*

Assessment

As part of the Swanson School of Engineering's commitment to student learning and academic achievement, effective teaching, and continuous improvement of our programs, we regularly conduct outcomes assessment activities. To obtain periodic measurements of student perceptions and intellectual growth, students will be expected to participate in surveys, focus groups, interviews, and related activities. While individual input is collected, the data resulting from these assessments will be published only in aggregate form.

Advising

First Year Engineering Student Advising:

All students are assigned an advisor and are expected to meet with their advisor prior to registration. The First Year Engineering Program's professional staff serves as first year advisors. Throughout the freshman year, students are encouraged to meet with their advisor if they need to register for classes, withdraw from classes, add and/or drop classes, seek out resources, find out about their academic progress, discuss problems they are having in a course, or get help deciding on a program. First Year Students are also assigned an Engineering Peer Mentor, who co-facilitates ENGR 0081 - Freshman Engineering Seminar with a professional staff advisor.

Continuing Undeclared Engineering Students will be advised by staff in the First-Year Engineering program (in collaboration with the Engineering programs) until they are department-ready. Students are considered Continuing Undeclared Engineering Students if they meet any of the following criteria:

- have yet to successfully complete more than one First-Year Engineering course
- have a cumulative GPA below 2.000
- have a grade of C- or lower in MATH 0230 (Calculus 2)
- have yet to successfully complete a critical class for their intended major, as follows:
    - Chemical Engineering: CHEM 0970 or CHEM 0120
    - Electrical and Computer Engineering: PHYS 0175

Students are expected to make progress toward completion of First-Year Engineering Program requirements within the first year of enrollment. Students who are unable to declare their major due to incomplete First-Year Program Requirements at the end of the first year have one additional year to complete these requirements and may be limited or restricted from taking departmental classes until first-year requirements are finished. Students should consult with their academic advisor on the most efficient academic path toward First-Year Program completion. Review of a student's academic progress will be made if first-year requirements are not completed by the end of the second year of enrollment.

Transfer Student Advising:

Incoming transfer students are directly admitted into their upper-level engineering program and will have a declared major, unless otherwise noted on their admission letter. For academic advisement, transfer students will be assigned an engineering faculty advisor by their department, which will be found in the student PeopleSoft Student Service. Undergraduate Coordinators/Directors and the Office of Transfer Student Services are also available as support resources during their academic career.

Upperclassmen Engineering Advising:

Undergraduate engineering students who have declared their major and entered an engineering department are assigned a faculty advisor upon entering their department. Undergraduate Coordinators/Directors are also available as faculty resources to undergraduate engineering students in their major. Students may consult their PeopleSoft Student Service Center to see the name of their Academic Advisor.

General Degree Requirements

The degree requirements are established by the individual departments and programs. Depending on the program, between 126 to 135 credits may be required for the individual degree. Each program's requirements include the common freshman year, a mathematics sequence (four or five courses depending on the program), and six approved humanities and social science electives (including the W-course requirement). The specific degree requirements are found in the program descriptions below.

Humanities and Social Science Requirement

An important part of the undergraduate engineering student's education is the humanities and social science component. All Swanson School of Engineering undergraduates must complete at least six humanities and social science elective courses from the school's approved list of Dietrich School of Arts and Sciences (A&S) courses, while meeting the school and ABET requirements for breadth and depth. To meet the depth requirement, a student must complete two or more courses in the same area of study only one of which can be considered an introductory course from the Dietrich School including both humanities and social sciences courses. The depth requirement can also be satisfied by taking two or more courses with a related theme, e.g., courses that focus on a geographic region, historic period, or ideological perspective. For the breadth requirements, it is recommended that the courses include approved offerings from at least three different departments from Arts and Sciences. Students may use one study abroad course that might not otherwise be counted toward satisfying this requirement.

No more than two of the required six elective courses can be satisfied via high school Advanced Placement, International Baccalaureate, and/or GCE-A-Level credits.

Students must also complete one W-designated course; i.e., a course that has a substantial writing component that has been so designated by the Dietrich School of Arts and Sciences (A&S). Depending on the course, it may also count as one of the humanities/social science electives. The Associate Dean for Academic Affairs maintains a list of approved humanities and social science electives. Students are not permitted to use College of General Studies courses including those indicated as either hybrid, self-paced, or online web courses.

Additional information about the Humanities and Social Sciences electives can be found here: Approved Humanities/Social Science Electives and Requirements.

Writing-Designated Course (W Course) Requirement

Engineering students must demonstrate an ability to communicate effectively. This includes both written and oral communication and the ability to make professional presentations. Upon admission, students with an SAT Evidence-Based Reading score below 560 (ACT 24) will be required to take at least one English Composition Course during their first year that will not count toward the Swanson School of Engineering graduation requirements.

All students must take at least one W course as part of their humanities/social science requirements. Please note that students may also satisfy the W requirement by taking a science course with a writing component. In addition, each engineering program has substantial communications components throughout the curriculum. Some programs require a specific course in communications. It is important to refer to each program's graduation requirements to identify requisite communication courses.

For students planning on a dual degree from the Swanson School of Engineering and a Dietrich School major, it is important to note the following: The University of Pittsburgh Composition Program has agreed that the Dietrich School of Arts and Sciences composition requirement is satisfied by ENGCMP 0210.

Writing courses may not be transferred in from another institution.

Online Courses

Undergraduate engineering students may take one humanities/social science and one engineering, engineering science, math or science course online subject to the following conditions:

1. Student must present a valid reason for taking the course.
2. The course must be from a four-year college or university that is accredited by Middle States Association of Colleges and Schools (or equivalent if outside the region).
3. In addition, an engineering or engineering science course must be from an ABET accredited program.
4. The humanities/social science courses must be from the arts and science unit of the institution and not from a continuing education, or general studies unit. The course must be taught in English.
5. The course must be first approved by the undergraduate coordinator and then by the Associate Dean for Academic Affairs.

Major and Degree Options

The following majors (described in the Program Descriptions section) within the Swanson School of Engineering offers the Bachelor of Science in Engineering:

- Bioengineering
- Chemical engineering
- Civil engineering (administered through the Department of Civil and Environmental Engineering)
- Computer engineering (administered through the Department of Electrical and Computer Engineering and the Department of Computer Science, A&S)
- Electrical engineering (administered through the Department of Electrical and Computer Engineering)
- Engineering Science (administered through the Department of Mechanical Engineering and Materials Science)
- Environmental Engineering (administered through the Department of Civil Engineering)
- Industrial engineering
- Materials science and engineering (administered through the Department of Mechanical Engineering and Materials Science)
- Mechanical engineering (administered through the Department of Mechanical Engineering and Materials Science)

Minors in Engineering

The Swanson School of Engineering offers a number of minors to its students who wish to expand their field of knowledge in engineering. Engineering students may also pursue a minor from a Dietrich School of Arts and Sciences program (see A&S section of this bulletin for details on the minors offered within A&S). Engineering students are not permitted to minor in the same field in which they are majoring. Students from outside the Swanson School of Engineering may pursue one of these minors with the permission of the administering program. Any student interested in a minor should consult with the given department to determine the eligibility and completion requirements for each minor. The minors offered by the school are as follows:

- Bioengineering
- Chemical engineering
- Civil engineering
- Electrical engineering
- Environmental engineering
- Industrial engineering
- Materials science and engineering
- Mechanical engineering
- Petroleum engineering
- Polymer engineering

Certificates Programs

Swanson School of Engineering undergraduate students are encouraged to broaden their educational experience by electing to take one of the certificate programs currently offered by Arts and Sciences, the University Center for International Studies (UCIS), or the Swanson School of Engineering. These certificate programs may be used by the engineering student to partially fulfill the humanities/social sciences requirement, thereby allowing specialization in an area of interest while pursuing an engineering degree. The requirements for each certificate vary, and students should contact the appropriate certificate program director.

The Swanson School of Engineering offers a number certificates at the undergraduate level:

- Engineering for Humanity Certificate
- Engineering Simulation in Design Certificate
- Health Systems Engineering Certificate
- Innovation, Product Design, and Entrepreneurship Certificate
- International Engineering Studies Certificate
- Nuclear Engineering Certificate
- Supply Chain Management Certificate
- Sustainability

In addition to certificates offered by the Swanson School of Engineering, additional certificates are available from other schools within the University, such as the one listed below.

- Engineering-School of Education Certification Program

The Swanson School of Engineering realizes the need to provide program flexibility and a variety of career options to undergraduate engineering majors. Careers in the teaching of mathematics, chemistry, and physics present one such option to students who have acquired a knowledge base in engineering. Through an articulated agreement with the University of Pittsburgh School of Education, a five-year Program of Study combines course work in engineering with Content Core Studies for the teaching of chemistry, mathematics, or physics; additionally, general education courses and pre-educational professional credits are included in the program. During the program's fifth year (after completion of the BS in engineering degree), students will complete the requirements for the Instructional I Certificate in their area of choice. This two-term program will enable them to teach in the Commonwealth of Pennsylvania.

For more information regarding scheduling and the admission policy of the agreement, talk with your advisor, or call 412-648-2230 to schedule a pre-admission meeting with a School of Education representative. See also http://www.education.pitt.edu/programs/certificates.aspx

Special Academic Opportunities/Programs

The Swanson School of Engineering offers numerous special academic opportunities as detailed in the following pages:

Reserve Officers Training Corps (ROTC)

Academic programs within the Swanson School of Engineering may give credit to students enrolled in Reserve Officers Training Corps (ROTC). This credit may be given in one of the following ways.

- Upon commissioning, some departments will award one technical elective for the student's entire ROTC coursework and training; or
- Some programs may review the specific courses and course objectives for individual ROTC courses to see if the individual course or courses may be counted toward toward program requirements.

Students enrolled in the ROTC program should meet with the undergraduate coordinator for review of how the ROTC program and courses may be counted for a specific major. Students are encouraged to participate in ROTC if this is of interest to them. With this in mind, the Swanson School of Engineering is lenient with those in the Navy program who must travel to Carnegie Mellon University for coursework and typically are permitted to take over 18 credits per term to satisfy the ROTC requirements.

Arts and Sciences-Engineering Dual Degree Program

The Dietrich School of Arts and Sciences (A&S) and the Swanson School of Engineering have developed an undergraduate dual degree program that permits a student to combine a major in arts and sciences with a program in engineering and then receive degrees from both A&S and the Swanson School of Engineering. A student can apply for admission into this program through either A&S or the Swanson School of Engineering and must be admitted into both schools.

While the form of the program is dependent upon the individual student's interests, the first year's curriculum is typically the standard engineering program. During the next three years the student may complete the specific requirements for his or her engineering degree while fulfilling certain A&S major and general education requirements. Typically, the fifth year is then used to complete the A&S requirements. Students must complete a minimum of 90 A&S credits, including all A&S skills and general education requirements and an A&S major (but not a related area). Students must also complete all the degree requirements of their chosen engineering program, usually consisting of 70 or more Swanson School of Engineering credits. Each program should be developed with an advisor in the Dietrich School of Arts and Sciences and an advisor in the Swanson School of Engineering and tailored to the student's special interests. Students in this program have combined engineering with neuroscience, philosophy, economics, music, and a number of the language programs.

Students must satisfy both schools' normal progress requirements and criteria for academic standing as long as they remain in the joint degree program. Students also must apply for graduation from both schools. A&S students earn either a BA or BS degree, depending upon the A&S program of study. The student's GPA for graduation from A&S is calculated based solely upon the credits earned for the A&S degree. For further information, students may contact one of the following: the First Year Engineering Program Office, 152 Benedum Hall; an engineering departmental undergraduate coordinator; the A&S Office, 140 Thackeray Hall; the A&S Advising Center, 252 Thackeray Hall; or the University Honors College engineering advisor, 3600 Cathedral of Learning.

University Honors College Opportunities

Students admitted to the University Honors College (Pitt Honors) and students interested in participating in honors courses have the opportunity to participate in several unique programs. Students admitted to Pitt Honors may elect to pursue the Bachelor of Philosophy degree or the Honors Joint degree in addition to their engineering Bachelor of Science degree. Students who have not been admitted to Pitt Honors prior to the first year may apply for degree candidacy in the University Honors College (UHC) after completing their first year at Pitt.

Students interested in taking honors courses but who do not wish to pursue the honors degree options may instead choose to challenge themselves in and out of the classroom by electing to pursue Honors Distinction, which involves both honors coursework and participation in the Honors Outside the Classroom Curriculum (OCC). Students interested in the Honors College should contact the Dean of the Honors College: 3500 Cathedral of Learning, University of Pittsburgh, Pittsburgh, PA 15260, or call 412-624-6880. (See the University Honors College section of this bulletin.)

Architecture Design Minor (Offered by History of Art and Architecture in the Dietrich School of Arts and Sciences)

Those working in many aspects of Civil Engineering, particularly in structural engineering and other building sciences, work intimately with architects. The Minor in Architecture - Design provides an opportunity for students to obtain experience and understanding of various aspects of the architecture profession. Students engage in two studio courses (ARC 0201 and ARC 1201), ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT, and at least one additional ARC or HAA elective. The requirements of the Minor are used to partially satisfy SSOE humanities requirements and ARC 1201 satisfies one 3 credit CEE elective requirement. Due to the nature of the Architecture - Design Minor, students must generally begin in their first or sophomore years. This Minor is administered through the History of Art and Architecture Department (HAA). For more information visit Department of History of Art and Architecture. However, SSOE students wishing to pursue this Minor are advised to contact Dr. Kent Harries in CEE before applying. Dr. Harries is located in 218B Benedum Hall, email: kharries@pitt.edu.

Cooperative Engineering Education Program

The school's Cooperative Engineering Education Program enhances the student engineer's educational experience through a series of challenging, highly relevant "real world" work sessions. This is accomplished by integrating a rotation of school and employment terms that enables the cooperative education student to complement his or her formal classroom training with additional technical knowledge, hands-on experience, and financial remuneration. The co-op graduate possesses the maturity and assurance of a more seasoned employee and the ability to incorporate academic knowledge and theory into practice. During co-op sessions, students earn competitive salaries, which also makes this program financially rewarding. Almost half of the graduating seniors complete the co-op program requirements.

Through the assistance of the Swanson School of Engineering's Cooperative Education Office, formal arrangements are established with industry that permit students to rotate four-month terms between the workplace and the classroom. At the University of Pittsburgh, this rotation begins during either the sophomore or junior year and extends into the senior year, with the co-op student completing at least three four-month work periods. These employment sessions, which are typically with the same employer, allow job duties to increase as the knowledge and skills of the student engineer progress. The positions can be local, national, or international. This practical work experience has also been found to increase academic motivation and classroom performance.

Because some of our students have also desired to see another industry or spend a term with full-time research, we have added that option as long as the student has a two-term experience with the same employer; this alternative to the standard program allows for the required depth in the assignment while completing the third term in another venue. Co-op students become aware of business practice and etiquette and possess a mature, responsible attitude. Thus, upon graduation, students who have successfully completed the three co-op rotations are able to handle more

challenging initial assignments with confidence and assurance. A high percentage of co-op students also obtain and accept full-time offers from their co-op employers.

Keep in mind that students who are on co-op rotations are unable to simultaneously hold employment positions as student workers or federal work study positions during that semester. Students earn transcript certification and a total of three credits towards departmental graduation requirements upon satisfactory completion of the program requirements. The co-op program offers resume preparation, interviewing skills, workshops and job fairs in order to facilitate appropriate placements for students.

Sample Co-op Schedules

SCHEDULE A	**Fall (Sept.-Dec.)**	**Spring (Jan.-April)**	**Summer (May-Aug.)**
First Year	School	School	
Second Year	School	School	
Third Year	**Work**	School	**Work**
Fourth Year	School	**Work**	School
Fifth Year	School		

SCHEDULE B	**Fall (Sept.-Dec.)**	**Spring (Jan.-April)**	**Summer (May-Aug.)**
First Year	School	School	
Second Year	School	School	**Work**
Third Year	School	**Work**	School
Fourth Year	**Work**	School	**Work**
Fifth Year	School		

SCHEDULE C	**Fall (Sept.-Dec.)**	**Spring (Jan.-April)**	**Summer (May-Aug.)**
First Year	School	School	
Second Year	School	**Work**	School
Third Year	**Work**	School	**Work**
Fourth Year	School	**Work**	School
Fifth Year	School		

For more information, please contact:

University of Pittsburgh
Swanson School of Engineering
Cooperative Engineering Education Program
152 Benedum Hall
Pittsburgh, PA 15260
412-624-9826

paub2m@pitt.edu
www.engineering.pitt.edu/coop/

Engineering International Programs

As the world around us grows ever more connected, it is evident that engineering students must be prepared to engage in an increasingly globalized world, and, upon graduation, to compete in an international job market. Accordingly, the Swanson School of Engineering has placed a strong emphasis on the development of exciting and academically enriching international programs for its students.

All students in SSOE are encouraged to add a global dimension to their education by pursuing one or more international programs as part of their academic study. At present, SSOE students may elect to participate in study, research, co-op, internship, or service learning abroad. Most of these opportunities are offered on a for-credit basis, and many can be used to satisfy major, minor, technical elective, or other degree requirements. Foreign language study is helpful, but not required, as many courses are on offer in English. Depending on their academic and personal interests, students may elect to participate in dozens of individual international programs. Some of these may last for only a week or two, either during spring break or over the summer term. Others may involve a commitment of a semester or even an entire academic year abroad. Depending on the type of study abroad program, there may be a minimum GPA requirement.

The Swanson Signature Study Abroad Programs are short term opportunities that focus on a relevant engineering topic in detail over the course of 10 to 14 days, to up to five weeks. Recently, Swanson Signature programs have occurred in Sweden, Denmark, Uruguay, Italy, Jamaica, and Germany, studying such diverse topics as renewable energy and sustainability, island nation risk, and global supply networks. Plus3 is another innovative short term program designed for first year SSOE students, and which has gone to such locations as Italy, Germany, Costa Rica, China, Vietnam, and Korea. Meanwhile, students who wish to invest in longer term language or cultural study may decide to participate in an exchange program. This affords them the opportunity to study engineering, social sciences or humanities at a foreign college or university for one or two consecutive academic terms, and for little more than the cost of a regular term in Pittsburgh. Finally, scholarships and other funding opportunities are also available, and financial aid administered by the University of Pittsburgh may apply.

There is a Global Distinction offered to University of Pittsburgh students that formally recognizes broad and meaningful engagement in global learning. The Swanson School of Engineering encourages its students to explore the requirements to obtain this distinction as a complement to their degree program.

Current and prospective SSOE students and their parents are welcome to contact the Office of Engineering International Programs for more information:

University of Pittsburgh
Swanson School of Engineering
Office of Engineering International Programs
152 Benedum Hall
3700 O'Hara Street
Pittsburgh, PA 15261
412-624-9825
http://www.engineering.pitt.edu/international/

Combined Liberal Arts-Engineering 3/2 Program

The Swanson School of Engineering has developed combined liberal arts/engineering dual degree programs with a number of accredited liberal arts colleges. In these "3/2 programs," students first complete a three-year structured course of study at the liberal arts college, including that college's general education requirements, specific introductory courses required for the engineering program of interest, and other courses necessary for acceptance into a Swanson School of Engineering program. With the recommendation of the faculty advisor at the liberal arts college, the student applies for transfer to the University of Pittsburgh Swanson School of Engineering, spending the final two or more years in an engineering program. Such programs typically enable the student to earn both a liberal arts degree and an engineering degree.

For additional information, please contact:

University of Pittsburgh
Swanson School of Engineering
First Year Engineering Program
Coordinator of Transfer Student Services
152 Benedum Hall
3700 O'Hara Street
Pittsburgh, PA 15261
412-624-9825
ssoetransfer@pitt.edu

Swanson School of Engineering-Diversity Initiatives

The Engineering Office of Diversity exists to create and sustain learning and working environments where differences and similarities are valued and respected, and all students, especially underrepresented students, are included and empowered to excel in engineering education. The office provides diversity education to undergraduates, graduate students, staff and faculty. The office also provides continuous academic and community support services through the its pre-college, undergraduate and graduate student programming.

Diversity Programs

The Swanson School of Engineering pre-college and undergraduate diversity programs develop and implement activities that promote and support the academic excellence of high achieving pre-college and undergraduate students from groups historically underrepresented in science, technology, engineering and mathematics (STEM) fields. These initiatives provide a continuous pipeline for students to prepare for, enter and graduate from the University of Pittsburgh as STEM majors.

Pitt EXCEL Program

The Pitt EXCEL Program is a comprehensive undergraduate diversity program committed to the recruitment, retention, development, and graduation of historically underrepresented engineering scholars. Pitt EXCEL scholars strive to advance in the areas of scholarship, professionalism, graduate endeavors, and community engagement. In addition, Pitt EXCEL scholars have access to academic counseling, peer mentoring for first year and upperclassmen scholars, year specific seminars, tutoring, engineering research, graduate school preparation and career development workshops. Lastly, first year Pitt EXCEL scholars are eligible to participate in our two-week intensive study skills, math and science summer bridge program.

The vision of the Pitt EXCEL Program:

1. Achieve 100% placement in each Pitt EXCEL scholar's desired engineering field of pursuit, inclusive of graduate school, industry, and medical school.

2. Establishing lifelong connections with fellow undergraduate students, staff, faculty, alumni, and industry relations.

3. Producing the highest achieving scholars that rank in the top 20% in all engineering disciplines within the Swanson School of Engineering.

For additional information, please contact:

University of Pittsburgh
Swanson School of Engineering
Pitt EXCEL Program
152 Benedum Hall
3700 O'Hara Street
Pittsburgh, PA 15261
Phone: 412-624-9625
Fax: 412-624-8869
http://www.engineering.pitt.edu/EXCEL/

Global Engineering Preparedness Scholarship (GEPS) Programs

Educating Engineers in Cultural and Societal Contexts

Thanks to a grant from the National Science Foundation, the University of Pittsburgh Swanson School of Engineering and its Office of Diversity (EOD) have established the Global Engineering Preparedness Scholarship program (GEPS). GEPS helps to support the recruitment, retention and graduation of low-income students from underrepresented minorities and majority populations. GEPS also prepares students for the global marketplace by offering international opportunities that students would not normally be able to participate without additional supporting funds.

Because the engineering career of the 21st century is more globally competitive than ever, GEPS also provides an integrative framework that focuses on access, continuous academic support, development of global competency and leadership experience. International experience is now an integral part of engineering education, and highly sought after by employers across all engineering disciplines. GEPS Scholars will have access to Pitt's exceptional education abroad programs to experience international skills sought by the engineering profession.

All GEPS Scholars who complete the second year of the program with GPA of 3.000 and above are eligible for the GEPS International Study Abroad Scholarship.

For additional information, please contact:

University of Pittsburgh
Swanson School of Engineering
Engineering Office of Diversity
128 Benedum Hall
3700 O'Hara Street
Pittsburgh, PA 15261
eodadmin@pitt.edu
412-624-9842

PITT STRIVE Program

The University of Pittsburgh Swanson School of Engineering PITT STRIVE Program (formerly known as the AGEP-TDAE). STRIVE stands for **S**uccess, **T**ransition, **R**epresentation, **I**nnovation, **V**ision, and **E**ducation. Thanks to a grant from the National Science Foundation, the University of Pittsburgh Swanson School of Engineering and its Office of Diversity (EOD) have established the PITT STRIVE Program to improve the transitions of Underrepresented Minorities (URM), who are US citizens, into doctoral engineering programs at the University of Pittsburgh and to ensure their successful completion by employing evidence-based strategies for student and faculty engagement and fostering an inclusive academic climate for URM doctoral students.

Scholarship Eligibility

PITT STRIVE Scholars will be recruited from members of underrepresented minority group (Black/African American, American Indian, Hispanic/Latino, Alaska Native, and Native Hawaiian or Pacific Islander) meeting US citizenship or permanent residency requirements with an undergraduate GPA of 3.3/4.0.

Other SSOE Diversity Initiatives:

First Year Diversity Workshop

Freshman Diversity Workshop is considered mandatory for all First Year engineering students. It provides the attendees with diversity awareness skills and explains the broad meaning of diversity and what it contributes to the personal, professional, and social improvement.

Diversity Professional Development Workshops

During Fall and Spring semesters, the Engineering Office of Diversity and PITT STRIVE program organize a series of workshops that allow the campus community to meet the leading experts in diversity-related issues and initiatives. The Engineering Office of Diversity and PITT STRIVE program also organize seminars and workshops dedicated to such nationally recognized celebrations as Hispanic Heritage Month, Black History Month, Women History Months, etc.

For additional information, please contact:

University of Pittsburgh
Swanson School of Engineering
Engineering Office of Diversity
128B Benedum Hall
3700 O'Hara Street
Pittsburgh PA 15261
eodadmin@pitt.edu
412-624-9842
http://www.engineering.pitt.edu/diversity/

Pre-College and Community Outreach

INVESTING NOW

INVESTING NOW, created in 1988, is a college preparatory program created to stimulate, support, and recognize the high academic performance of pre-college students from historically underrepresented groups. The purpose of this program is to expose high achieving students to science, technology, engineering and mathematics (STEM) careers and prepare them to be successful at the University of Pittsburgh or other highly competitive universities.

The program's primary goals are to:

1. Create a pipeline for well-prepared students to enter college and pursue science, technology, engineering and mathematics majors;
2. Encourage and support student' enrollment and achievement in advanced mathematics and science courses;
3. Ensure that the participants make informed college choices;
4. Support and encourage parents in their role as advocates for their children; and
5. Coordinate partnerships between the University of Pittsburgh's Swanson School of Engineering and local and regional schools.

Membership in INVESTING NOW a student's commitment to attend year-round programming from ninth through twelfth grade.

For additional information, please contact:

University of Pittsburgh
Swanson School of Engineering
INVESTING NOW
152 Benedum Hall
3700 O'Hara Street
Pittsburgh, PA 15261
412-624-0224
http://www.engineering.pitt.edu/InvestingNow/

Office of Retention

The Office of Retention provides academic support programs for Swanson School of Engineering students who want to achieve and maintain academic excellence towards graduation. Students who work with the director and consistently participate in programming improve academic performance as they learn about study skills, the learning process, how to study difficult material, forming study groups, test anxiety and test taking strategies, managing distractions, growth mindset, grit, discipline, organization, productivity, and time management. Tutoring, peer mentoring and academic coaching sessions available.

For additional information, please contact:

University of Pittsburgh
Swanson School of Engineering
Office of Retention
152 Benedum Hall
3700 O'Hara Street
Pittsburgh, PA 15261
412-624-9161
apersaud@pitt.edu

Approved Humanities/Social Science Electives and Requirements

Undergraduate Requirements

All Swanson School of Engineering undergraduates must complete at least six humanities and social science elective courses from the School's list of approved courses in order to satisfy Swanson School of Engineering and ABET accreditation requirements for breadth and depth. In order to meet these standards, all Engineering undergraduate students must fulfill the following requirements when choosing their six elective classes:

Depth Requirement

- Students must complete two or more courses from one of the approved departments or programs in the Dietrich School of Arts and Sciences.
- A student may also satisfy the Depth Requirement by completing two or more courses with a related theme, e.g. courses that focus on a geographic region, historic period, or ideological perspective.
- Only one course below the 0200 level may be used to satisfy the depth requirement, except in the departments of Psychology, Linguistics, and languages.
- Some transfer and AP courses may transfer to the Swanson School under Catalog Number 0000 (e.g. ENGLIT 0000). Multiple courses in the same Subject with Catalog Number 0000 may count toward students' elective requirements, but may not together satisfy the depth requirement.

Breadth Requirement

- Students must select courses from at least three different Dietrich School of Arts and Sciences humanities and social science departments.
- Students must select courses from both the humanities and social science departments.

Departmental Requirements

- It is important to note that some of the Engineering majors have additional guidelines for selecting the six humanities and social science elective requirements. Students are responsible for checking with their departments for any supplemental requirements.
- Notes and Restrictions on Selecting Electives
- No more than two of the required six elective courses can be satisfied via high school Advanced Placement or International Baccalaureate credits.
- Language classes may not be taken in the student's native language, unless placement is deemed appropriate by the language department in question.
- Independent Study courses, Study Abroad courses, Directed Study, and Research courses will not satisfy humanities/social science elective requirements unless they have been pre-approved by your department's Undergraduate Coordinator and the Associate Dean for Academics. In the listing below, they are listed as not approved, as are any additional independent study, study abroad, directed study, or research courses. See your department's Undergraduate Coordinator if these courses interest you.
- All humanities/social science elective courses must be taken for 3 or more credits. Courses that are offered for fewer than 3 credits may NOT be combined to count as an elective.
- Courses that are cross-listed with other departments may be taken under either course number (i.e. ANTH 1524 is equivalent to HAA 1650) and may be used to satisfy the depth requirement in either department.
- All Swanson School of Engineering students must also complete at least one "W"-designated course in which the "W" indicates that a course has a substantial writing component as approved by the School of Arts and Sciences. Students should refer to Peoplesoft each term to determine whether a course is being offered as a "W"-designated course. In the Class Search screen, choose "Writing Option" from the Requirement Designation field. Every School of Arts and Sciences department offers "W"-designated courses, which may or may not satisfy Swanson School of Engineering humanities or social science requirements.

Global Distinction

The Global Distinction is a new Pitt credential that supports your growth in learning more about the world inside and outside the classroom.

By completing course work across disciplines and participating in global activities and experiences at home or abroad, you can earn official recognition for your work. The credential also brings milestone rewards and, upon completion, a personal Global Distinction URL for use on your résumé and networking sites.

The Global Distinction is a great way to demonstrate your cross-cultural exposure and awareness to potential employers. Follow the steps or check out the Flyer to learn how to enroll now.

Benefits of Earning the Global Distinction

- **Transcript annotation**: Your achievement noted on your academic transcript
- **Personalized digital transcript**: Digital catalog of your work with a unique URL for your résumé and networking sites and sharing with prospective employers and recruiters
- **Rewards and incentives**: Special prizes, networking invitations, and advance notice of or preferred consideration for travel grants or other funding opportunities for achieving competency milestones
- **Graduation honorable mention**: Special recognition during your school's and the University Center for International Studies' graduation ceremonies

Credential Requirements

To earn the Pitt Global Distinction, undergraduate students complete the following:

1	Enrollment Form
6	Credits of global course work (international/area/thematic studies courses)
24	Global events or activities

2	High-impact global experiences
	Beginner (complete one): • First-year seminar • Living Learning Community (Casa Cultural, Global Village) • Writing-intensive course Advanced (complete one): • Service/community-based learning • Study abroad • Undergraduate research project • Internship (at home or abroad) • Capstone course or project
1	Reflection (unless pursuing a capstone)

Enroll Now!

Enroll today to find out how many of your in-progress or completed courses and global activities and experiences qualify. MyPittGlobal on the mobile app Suitable will keep track of everything for you, including the special rewards and incentives you are eligible for along the way. You can start at any time.

1. Go to my.pitt.edu.
2. Click on the myPittGlobal icon.
3. Log in using your Pitt credentials.
4. Search: Distinction Enrollment.
5. Complete the online form.

Contact information for questions: globaldistinction@pitt.edu

Approved Course Listing

- Only an officially listed School of Arts and Sciences course may be used to fulfill a humanities and social science requirement. Approved departments may be found below. Courses from the College of General Studies (including External Studies courses), the College of Business Administration, or the School of Information Sciences cannot be used to fulfill the humanities and social science requirements.
- These courses may be used to satisfy a free or open elective requirement, though students should always discuss these courses with an Academic Advisor before selecting and registering for such a course.
- Only A&S courses are acceptable. CGS courses are not acceptable including Administration of Justice courses. Courses designated as self-paced (self), online (www) or hybrid online (hybrid) in CGS or A&S are not acceptable except by the Associate Dean's permission, as outlined in the Online Courses policy in the SSOE Catalog.

AFRICANA STUDIES (AFRCNA)- SOCIAL SCIENCE
All three-credit courses in AFRCNA below 1760 are approved, including AFRCNA 0000.

AMERICAN SIGN LANGUAGE (ASL) - HUMANITIES
All three- or four-credit courses in ASL below 1900 are approved, including ASL 0000.

ANTHROPOLOGY (ANTH) - SOCIAL SCIENCE
ANTH courses below 0450 are <u>not</u> approved.
ANTH 1164, 1497, 1498, 1499, 1516,1520, 1534 1537, 1602, 1605, 1609, 1613, 1617, 1627, 1712, 1750 are <u>not</u> approved.
Other three-credit courses in ANTH between 0450 and 1899 are approved, as is ANTH 0000.

ARABIC (ARABIC) - HUMANITIES
All three-, four-, or five-credit courses in ARABIC below 1900 are approved, including ARABIC 0000.

ARCHITECTURAL STUDIES (ARC) - HUMANITIES
All three-credit courses in ARC between 0110-0300, 1118-1191, 1310, and 1330 are approved, as well as ARC 0201, 1201, and 1202.

ARTS AND SCIENCES (ARTSC) - SOCIAL SCIENCE
The following are approved courses:
ARTSC 0150 - INTRODUCTION TO GLOBAL STUDIES
ARTSC 1501 - SEMINAR: LATIN AMERICA

CHINESE (CHIN) - Humanities
All three-, four-, or five-credit courses in CHIN below 1900 are approved, including CHIN 0000.

CLASSICS (CLASS) - HUMANITIES
All three credit courses in CLASS below 1900 are approved, including CLASS 0000.

COMMUNICATION (COMMRC) - SOCIAL SCIENCE
The following COMMRC Courses and COMMRC 0000 are approved:
COMMRC 0300 - COMMUNICATION PROCESS
COMMRC 0310 - RHETORICAL PROCESS
COMMRC 0320 - MASS COMMUNICATION PROCESS
COMMRC 0500 - ARGUMENT
COMMRC 0530 - INTERPERSONAL COMMUNICATION
COMMRC 0540 - DISCUSSION
COMMRC 1103 - RHETORIC AND CULTURE
COMMRC 1104 - POLITICAL COMMUNICATION
COMMRC 1105 - TELEVISION AND SOCIETY
COMMRC 1106 - SMALL GROUP COMMUNICATION
COMMRC 1111 - THEORIES OF PERSUASION
COMMRC 1122 - MEDIA CRITICISM
COMMRC 1123 - RHETORICAL CRITICISM
COMMRC 1148 - RHETORIC AND HUMAN RIGHTS
COMMRC 1160 - VISUAL RHETORIC
COMMRC 1161 - COMMUNICATION ETHICS
COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION
COMMRC 1731 - SPECIAL TOPICS IN RHETORIC
COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION

ECONOMICS (ECON) - SOCIAL SCIENCE
The following ECON Courses and ECON 0000 are approved:
ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
ECON 0120 - INTRODUCTORY ECONOMIC THEORY
ECON 0140 - INTRODUCTION TO POLITICAL ECONOMY
ECON 0160 - INTRODUCTION TO ECONOMETRICS (W sections only)
ECON 0200 - GAME THEORY PRINCIPLES
ECON 0220 - INTRO TO HEALTH ECONOMICS
ECON 0230 - INTRODUCTION TO PUBLIC ECONOMICS
ECON 0280 - MONEY AND BANKING
ECON 0330 - URBAN ECONOMICS
ECON 0360 - INTRODUCTION TO ENVIRONMENT AND RESOURCE ECONOMICS
ECON 0400 - LABOR AND THE ECONOMY
ECON 0430 - WOMEN IN THE LABOR MARKET
ECON 0450 - ECON OF TECHNOLOGICAL CHANGE
ECON 0460 - SPORTS ECONOMICS
ECON 0470 - INDUSTRIAL ORGANIZATION 1
ECON 0480 Consumer Economics
ECON 0490 - TRANSPORTATION ECONOMICS
ECON 0500 - INTRODUCTION TO INTERNATIONAL ECONOMICS
ECON 0520 - COMPARATIVE ECONOMIC SYSTEMS
ECON 0530 - INTRODUCTION TO DEVELOPMENT ECONOMICS
ECON 0630 - EAST ASIA'S DYNAMIC ECONOMIES
ECON 0640 - ECONOMIC DEVELOPMENT OF THE MIDDLE EAST AND NORTH AFRICA (MENA) REGION
ECON 0700 Economics of Information Sci. (UHC)
ECON 0800 - INTRODUCTION TO ECONOMICS
ECON 0810 - CONSUMER ECONOMICS
ECON 0820 - REGULATED INDUSTRIES
ECON 1010 - AMERICAN ECONOMIC HISTORY (HIST 1645)
ECON 1030 - INTELLCL FOUNDTNS OF CAPITALISM (HIST 1145)
ECON 1050 - SOCIALISM VERSUS CAPITALISM (HIST 1045)
ECON 1070 - HISTORY OF ECONOMIC THOUGHT 1
ECON 1080 - HISTORY OF ECONOMIC THOUGHT 2
ECON 1100 - INTERMEDIATE MICROECONOMICS
ECON 1110 - INTERMEDIATE MACROECONOMICS
ECON 1200 - GAME THEORY
ECON 1210 - MICROECONOMICS
ECON 1230 - INTERMEDIATE PUBLIC ECONOMICS

ECON 1260 - EXPERIMENTAL ECONOMICS
ECON 1280 - MONETARY THEORY AND POLICY
ECON 1300 - INTRODUCTION TO REGIONAL ECONOMICS
ECON 1320 - URBAN ECONOMICS
ECON 1390 - WORK, SELF AND SOCIETY
ECON 1400 Theory of Labor Unions
ECON 1410 - COLLECTIVE BARGAINING
ECON 1420 - LABOR ECONOMICS
ECON 1440 - ECONOMICS OF CORPORATION FINANCE
ECON 1470 - MARKET STRUCTURE AND COMPETITION
ECON 1480 - ECONOMICS OF INNOVATION
ECON 1500 - INTERMEDIATE INTERNATIONAL TRADE
ECON 1530 - INTERMEDIATE DEVELOPMENT ECONOMICS
ECON 1580 - ECON GROWTH PBLC HLTH DEMOGRAPHY
ECON 1590 - PEOPLE RESOURCES USSR/E EUROPE
ECON 1610 - LATIN AMERICA ECON DEVELOPMENT
ECON 1620 - ECON DEVELOPMENT SOCIALIST CUBA
ECON 1630 - ECONOMIC DEVELOPMENT OF CHINA
ECON 1640 - JAPANESE ECONOMIC GROWTH
ECON 1670 - FORMER SOCIALIST ECON & TRANSTN
ECON 1700 - CAPSTONE SEMINAR IN MICROECONOMICS
ECON 1710 - CAPSTONE SEMINAR IN INTERNATIONAL ECONOMICS
ECON 1720 - CAPSTONE SEMINAR IN MACROECONOMICS
ECON 1905 - SPECIAL TOPICS
ECON 1960 - POLITICS AND ECONOMICS OF PUBLIC POLICY

ENGLISH COMPOSITION (ENGCMP) - HUMANITIES*
All three-credit courses in ENGCMP between 0400 and 1899 are approved, as are ENGCMP 0000 and 0210. Note that no course may be used as both a humanities/social science elective and as a communication elective in the engineering departments that require one. These requirements must be fulfilled through separate courses.

**On 9/25/2020 this information was approved for change. In an effort to provide accurate information the update was made on 9/28/2020.*

ENGLISH LITERATURE/ENGLISH FILM (ENGLIT/ENGFLM) - HUMANITIES
All three-credit courses in ENGLIT between 0300 and 1899 are approved, as is ENGLIT 0000.
All three-credit courses in ENGFLM below 1900 are approved, including ENGLIT/ENGFLM 0000.

ENGLISH WRITING (ENGWRT) - HUMANITIES
ENGWRT 0053 is <u>not</u> approved.
All other three-credit courses in in ENGWRT below 1700 are approved, including ENGWRT 0000.

FILM STUDIES (FLMST) - HUMANITIES
All three-credit courses in FLMST below 1900 are approved, as is FLMST 0000.

FRENCH (FR) - HUMANITIES
FR 0197, 0452, 1494, 1497, 1498 are <u>not</u> approved.
All other three-, four-, or five-credit courses in FR below 1900 are approved, as is FR 0000.

GENDER, SEXUALITY, AND WOMEN'S STUDIES (GSWS) - INTERDISCIPLINARY
All three-credit courses in GSWS between 0100 and 1899 are approved, as are GSWS 0000 and 0030.

GEOGRAPHY (GEOG) - SOCIAL SCIENCE
The following GEOG courses and GEOG 0000 are approved:
0210 Physical Geography
0810 Earth and People

GERMAN (GER) - HUMANITIES
GER 0031, 0197, 1104, 1204, 1399, 1531, and 1550 are <u>not</u> approved.
All other three-, four-, or five-credit courses in GER below 1900 are approved, as is GER 0000.

GREEK (GREEK) - HUMANITIES
All three-, four-, or five- credit courses in GREEK below 1800 are approved, including GREEK 0000.

HINDI (HINDI) - HUMANITIES
All three-, four-, or five-credit courses in HINDI below 1900 are approved, including HINDI 0000.

HISTORY (HIST) - SOCIAL SCIENCE
HIST 1000, 1001, 1030, 1449, 1494, 1497, 1498, 1499, and 1745 are not approved.
All other three-credit courses in HIST below 1800 are approved, including HIST 0000.

HISTORY OF ART AND ARCHITECTURE (HAA) - HUMANITIES
All three-credit courses in HAA below 1900 are approved, as are HAA 0000 and HAA 1913.

HISTORY AND PHILOSOPHY OF SCIENCE (HPS) - HUMANITIES
All three-credit courses in HPS below 1700 are approved, including HPS 0000.

HONORS (HON) - INTERDISCIPLINARY
The following HON courses are approved:
HONORS 1110 - COMPARATIVE STUDIES-LEADERSHIP
HONORS 1160 - DISCOURSES IN HUMAN KNOWLEDGE

IRISH (IRISH) - HUMANITIES
All three-, four-, or five-credit courses in IRISH below 1900 are approved, including IRISH 0000.

ITALIAN (ITAL) - HUMANITIES
All three-, four-, or five-credit courses in ITAL below 1900 are approved, including ITAL 0000.

JAPANESE (JPNSE) - HUMANITIES
JPNSE 1494 is not approved.
All other three-, four-, or five-credit courses in JPNSE below 1900 are approved, including JPNSE 0000.

JEWISH STUDIES (JS) - INTERDISCIPLINARY
All three-, four-, or five-credit courses in JS below 1900 are approved, including JS 0000.

KOREAN (KOR) - HUMANITIES
All three-, four-, or five-credit courses in KOR below 1900 are approved, including KOR 0000

LATIN (LATIN) - HUMANITIES
All three-, four-, or five-credit courses in LATIN below 1800 are approved, including LATIN 0000.

LESS COMMONLY TAUGHT LANGUAGES (LCTL) - HUMANITIES
All three-, four-, or five-credit courses in LCTL below 1900 are approved, including LCTL 0000.

LINGUISTICS (LING) - HUMANITIES
LING 1330, 1340, and 1441 are not approved.
All other three-, four-, or five-credit courses in LING between 0080 and 1799 are approved, including LING 0000.

MEDIEVAL AND RENAISSANCE STUDIES (MRST) - HUMANITIES
All three-credit courses in MRST below 1900 are approved, including MRST 0000.

MUSIC (MUSIC) - HUMANITIES
Music voice and/or instrument lessons may count as a humanities/social science elective if they are taken for three credits in a given semester. One- or two-credit MUSIC courses may not be combined to count as a humanities/social science elective.
MUSIC 1401, 1494, and 1497 are not approved.
All other three-credit courses in MUSIC below 1900 are approved, including MUSIC 0000.

PERSIAN/FARSI (PERS) - HUMANITIES
All three-, four-, or five-credit PERS classes below 1900 are approved, including PERS 0000.

PHILOSOPHY (PHIL) - HUMANITIES
PHIL 0500, 1494, and 1497 are not approved.
All other three-credit courses in PHIL below 1900 are approved, including PHIL 0000.

POLISH (POLISH) - HUMANITIES
All three-, four-, or five-credit courses in POLISH below 1900 are approved, including POLISH 0000.

POLITICAL SCIENCE (PS) - SOCIAL SCIENCE
PS 0700, 1000, 1449, 1494, 1497, 1498, 1499, 1700, 1702, 1800, and 1820 are not approved.
All other three-credit courses in PS between 0200 and 1899 are approved, as well as PS 0000.

PORTUGUESE (PORT) - HUMANITIES
All three-, four-, or five-credit courses in PORT below 1900 are approved, including PORT 0000.

PSYCHOLOGY (PSY) - SOCIAL SCIENCE
The following PSY courses and PSY 0000 are approved:
PSY 0010 - INTRODUCTION TO PSYCHOLOGY
PSY 0015 Introduction to Psychology as Natural Science (cannot also take 0010)
PSY 0035 - RESEARCH METHODS
PSY 0105 - INTRODUCTION TO SOCIAL PSYCHOLOGY
PSY 0160 - PSYCHOLOGY OF PERSONALITY
PSY 0182 - LAW AND SOCIAL PSYCHOLOGY
PSY 0184 - PSYCHOLOGY OF GENDER
PSY 0205 - PSYCHOPATHOLOGY
PSY 0310 - DEVELOPMENTAL PSYCHOLOGY
PSY 0405 - LEARNING AND MOTIVATION
PSY 0422 - COGNITIVE PSYCHOLOGY
PSY 0680 - INTRODUCTION INDUSTRIAL/ORGANIZATIONAL
PSY 1050 - TOPICS IN PSYCHOLOGY
PSY 1051 - TOPICS IN SOCIAL PSYCHOLOGY
PSY 1110 - PSYCHOLOGICAL ASPECTS OF HUMAN SEXUALITY
PSY 1112 - PSYCHOLOGICAL ASPECTS OF HUMAN SEXUALITY: RESEARCH WRITING PRACTICUM
PSY 1140 - SOCIAL MOTIVATION
PSY 1155 - PSYCHOLOGY OF SMALL GROUPS
PSY 1205 - ABNORMAL PSYCHOLOGY
PSY 1215 - HEALTH PSYCHOLOGY
PSY 1305 - EXPERIMENTAL CHILD PSYCHOLOGY
PSY 1312 - CHILD DEVELOPMENT & SOCIAL POLCY
PSY 1315 - DEVELOPMENTAL PSYCH: INFANCY
PSY 1330 - DEVELOPMENTAL PSYCHOLOGY: COGNITIVE DEVELOPMENT
PSY 1357 - PSYCHOLOGY OF AGING
PSY 1470 - COGNITION AND THE BRAIN
PSY 1630 - PERSONNEL PSYCHOLOGY
PSY 1635 - ORGANIZATIONAL PSYCHOLOGY

QUECHUA/KICHWA (QUECH) - HUMANITIES
All three-, four-, and five-credit courses in QUECH below 1900 are approved, including QUECH 0000.

RELIGIOUS STUDIES (RELGST) - HUMANITIES
All three-credit courses in RELGST below 1780 are approved, including RELGST 0000.

RUSSIAN (RUSS) - HUMANITIES
RUSS 0211, 0216, 0221, 0226, 0231, 0236, 0241, and 0246 are not approved.
All other three-, four-, or five-credit courses in RUSS below 1900 are approved, including RUSS 0000.

SERBO-CROATIAN (SERCRO) - HUMANITIES
SERCRO 0212, 0213, 0223, 0231, and 0233 are not approved.
All other three-, four-, or five-credit courses in SERCRO below 1900 are approved, including SERCRO 0000.

SLAVIC (SLAV) - HUMANITIES
SLAV 0222, 0223, 0224, 0225, 0232, 1050, 1710, and 1720 are not approved.
All other three-, four-, or five-credit courses in SLAV below 1900 are approved, including SLAV 0000.

SLOVAK (SLOVAK) - HUMANITIES
SLOVAK 0211, 0212, 0221, 0222, and 0232 are not approved.
All other three-, four-, or five-credit courses in SLOVAK below 1900 are approved, including SLOVAK 0000.

SOCIOLOGY (SOC) - SOCIAL SCIENCE
SOC 0197, 0230, 0300, 0710, 0715, 0720, 0725, 0726, 0735, 0750, 1114, 1277, 1416, 1455, 1494, 1497, 1498, 1499, 1500, 1515, and 1700 are not approved.
All other three-credit courses in SOC below 1800 are approved, including SOC 0000.

SPANISH (SPAN) - HUMANITIES
SPAN 0197, 1494 and 1497 are not approved.
All other three-, four-, or five-credit courses in SPAN below 1900 are approved, including SPAN 0000.

STUDIO ARTS (SA) - HUMANITIES
All three-credit courses in SA below 1500 are approved, including SA 0000.

SWAHILI (SWAHIL) - HUMANITIES
SWAHIL 0111 is not approved.
All other three-, four-, or five-credit courses in SWAHIL below 1900 are approved, including SWAHIL 0000.

SWEDISH (SWE) - HUMANITIES
All three-, four-, or five-credit courses in SWE below 1900 are approved, including SWE 0000.

THEATER ARTS (THEA) - HUMANITIES
THEA 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1494, 1497, 1498, 1499, and 1733 are not approved.
All other three-credit courses in THEA between 0800 and 1899, as well as THEA 0000 and THEA 0505 are approved.

TURKISH (TURKISH) - HUMANITIES
All three-, four-, or five-credit courses in TURKISH below 1900 are approved, including TURKISH 0000.

UKRAINIAN (UKRAIN) - HUMANITIES
All three-, four-, or five-credit courses in UKRAIN below 1900 are approved, including UKRAIN 0000.

URBAN STUDIES (URBNST) - SOCIAL SCIENCE
The following URNST courses and URBNST 0000 are approved:
URBNST 0400 - CRIME, PUNISHMENT, JUSTICE, REINTEGRATION
URBNST 1408 - GLOBAL CITY - FLORENCE
URBNST 1410 - GLOBAL CITY - LONDON
URBNST 1613 - SUSTAINABLE CITIES 1: THEORIES AND CONCEPTS
URBNST 1614 - URBAN SUSTAINABILITY
URBNST 1615 - SUSTAINABLE CITIES 2: FIELD RESEARCH

VIETNAMESE (VIET) - HUMANITIES
All three-, four-, or five-credit courses in VIET below 1900 are approved, including VIET 0000.

Swanson School of Engineering Faculty

School of Engineering Faculty

Program and Course Offerings

Students enter one of the specific engineering major programs below at the sophomore level after successfully completing the First-Year Student Engineering Program.

Degree Programs in BS in Engineering

Bioengineering
Chemical Engineering
Civil Engineering
Computer Engineering
Electrical Engineering
Engineering Science
Environmental Engineering
Industrial Engineering
Materials Science and Engineering
Mechanical Engineering

Certificate Programs

Engineering for Humanity Certificate
Engineering Simulation in Design Certificate
Health Systems Engineering Certificate
Innovation, Product Design, and Entrepreneurship Certificate
International Engineering Studies Certificate
Nuclear Engineering Certificate

Supply Chain Management Certificate
Sustainability Certificate

Programs

Major

- First-Year Student Engineering Program

Certificate

- Engineering for Humanity Certificate
- Innovation, Product Design, and Entrepreneurship Certificate
- International Engineering Studies Certificate
- Sustainability Certificate

Certificate

Nanoscience and Engineering Undergraduate Certificate

Advances in nanoscience and nanotechnology (the ability to predict, create, and design with nanoscale materials and systems) are expected to reveal new physical phenomena and to enable the creation of highly desirable products and devices, in addition to revolutionary changes in industrial practice. Strength in nanoscience and nanotechnology has been identified as the nation's future competitiveness and prosperity, and strategic plans have been developed to accelerate nanoscience research and development, encourage knowledge transfer to spur economic growth, and expand educational programs and workforce training - all in a socially and environmentally responsible and sustainable manner.

Nanoscience and nanotechnology also has had a large and rapidly growing local impact. The Pittsburgh region is home to a number of corporations, including many smaller start-up companies, with major nanotechnology components to their businesses. The continued success of companies such as PPG, Seagate, Bayer, Alcoa, Plextronics, Westinghouse, Bettis, and II-VI will depend on their ability to recruit local engineering talent with the required background in nanoscience and nanotechnology. The continued development of nanotechnology-based entrepreneurial start-ups will depend in large part on a vibrant pool of young engineers and scientists with appropriate educational experience in nanoscience and nanotechnology.

This joint certificate, housed in both the Swanson School of Engineering (SSOE) and the Dietrich School of Arts and Sciences (Dietrich School) enables BS students from both schools to complement their education by completing a fivecourse sequence. The certificate is designed to be combined with coursework in any SSOE degree-granting program, or with chemistry and physics in the Dietrich School.

The course requirements for this certificate follow.

Required courses

This course has prerequisites.

- ENGR 0240 - NANOTECHNOLOGY AND NANO-ENGINEERING

One of the following courses

These courses have prerequisites.

- PHYS 1375 - FOUNDATIONS OF NANOSCIENCE

One of the following courses

- PHYS 1903 - DIRECTED RESEARCH

Two elective courses from the following list

- CHEM 1600 - SYNTHESIS & CHARCTRZTN POLYMERS
- CHEM 1620 - ATOMS, MOLECULES AND MATERIALS
- ECE 0257 - ANALYSIS AND DESIGN OF ELECTRONIC CIRCUITS
- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- ECE 2295 - SPECIAL TOPICS: ELECTRONICS
- ENGR 0241 - FABRICATION AND DESIGN IN NANOTECHNOLOGY

- IE 1012 - MANUFACTURE OF STRUCTURAL NANOMATERIALS
- IE 2012 - MANUFACTURE OF STRUCTURAL NANOMATERIALS

- MEMS 1057 - MICRO/NANO MANUFACTURING

- PHYS 1361 - WAVE MOTION AND OPTICS
- PHYS 1374 - SOLID STATE PHYSICS

One of the following courses

- CHEM 1410 - PHYSICAL CHEMISTRY 1
- CHEM 1420 - PHYSICAL CHEMISTRY 2
- CHEM 1480 - INTERMEDIATE PHYSICAL CHEMISTRY

One of the following courses

- PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1
- PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2

Additional information and requirements

- No more than six credits of coursework may overlap between the reuirements for this certificate and a major in Physic and Astronomy or in Chemistry.
- A minimum GPA of 2.0 is required in each course that counts toward the certificate.
- No course that counts toward this certificate may be taken on an S/NC basis.
- For more information about this certificate, Dietrich School students should contact the departmental advisor in Physics and Astronomy.

Department of Bioengineering

Bioengineering is an ABET-accredited undergraduate degree program that combines education in engineering and biological sciences, forming a unique experience to prepare students for today's technical challenges in medicine and biology. Our focus is on developing engineers who can apply an analytic approach to solving problems in living systems. Thus, we provide students with a comprehensive education in both engineering and the life sciences.

Research Areas

Undergraduates are required to participate in research with a faculty mentor. In addition to our primary faculty, our strong connections with the Schools of Medicine, Dental Medicine, and Health and Rehabilitation Sciences provide multiple opportunities for students to engage in research in such areas as:

Cellular Engineering

Biomaterials

Tissue Engineering

Movement and Balance

Biotribology

Artificial Organs

Biorheology

Radio Frequency Imaging

Neural Engineering

Clinical Engineering

Our unique laboratory, clinical, and research experiences beyond the classroom are opportunities that few, if any, universities can match.

What Can you Do with a Bioengineering Degree

Graduates of our Bioengineering Program are prepared to obtain employment in industry (about 60%), seek further graduate education (M.S./Ph.D., about 20%), and pursue a career as a health science practitioner (M.D./D.O./P.A./M.P.H., about 20%). Those going to industry have many roles, such as: design of instruments and devices used in healthcare; development of diagnostic tools; assess technology for regulatory compliance with FDA requirements; training clinicians in the use of biomedical technology; research new approaches to providing healthcare; prepare and document procedures and reports; and make recommendation to senior management. Advanced graduate education training can lead to more responsible roles in industry or academic positions in teaching, research, and development. Medical practitioners draw upon skills developed as a bioengineer to help diagnose medical problems and identify new approaches to medical technology.

Curriculum and Electives

The Bioengineering Program undergraduate curriculum requires 29 courses that provide a broad background in mathematics, physics, chemistry, biology, and bioengineering, plus 13 electives. Five of the electives are drawn from a large selection in the Humanities and Social Sciences. The remaining eight electives are selected to meet requirements of one of four tracks (Bioimaging and Signals, Biomechanics, Cellular Engineering, Medical Product Engineering) that provide in depth experience in an area of the student's choice. The curriculum is designed to provide the breadth and depth required for ABET accreditation and to be a competitive engineer in the global marketplace. The curriculum has also been designed to allow students interested in "pre-med" to satisfy medical school requirements within the requirements of any track.

Cooperative Education and International Experience

The Department of Bioengineering encourages all students to enhance the value of their degree through participation in the Cooperative Education (co-op) and International Studies programs offered by the Swanson School of Engineering. Co-op provides students with semester rotations between college and full-time work assignments with corporate partners that relate directly to bioengineering. An international experience offers a global perspective and cross-cultural awareness of engineering practice that enhances post-graduate opportunities.

Major

Bioengineering

Bioengineering

The undergraduate program in Bioengineering combines education in engineering and biological sciences, forming a unique experience to prepare students for today's technical challenges in medicine and biology. Our focus is on developing engineers who can apply an analytic approach to solving problems in living systems. Thus, we provide students with a comprehensive education in both engineering and the life sciences. Students enrolled in the program will be prepared for continued graduate studies or a career in a bioengineering-related industry. The program also provides a solid undergraduate education for further studies in a school of medicine. The bioengineering program is accredited by the Engineering Accreditation Commission of ABET (http://www.abet.org).

In keeping with the two-fold mission of the Department of Bioengineering to

- provide a high quality engineering education to both undergraduate and graduate students; and
- be a leader in research in specific areas encompassed by Bioengineering,

the Bioengineering undergraduate curriculum objective is to prepare students to achieve their post-baccalaureate goal of:

- an industrial career in bioengineering or related field;

- graduate school (MS and PhD programs related to bioengineering); or
- professional school (Medical, Dental, Health Related, Business, and Law).

To achieve the objective, students are:

- provided both a broad knowledge of the technical and social principles of bioengineering as well as a focused education in one track area within bioengineering, and
- prepared through educational experiences beyond the classroom that deepen their understanding of the technical and non-technical issues in bioengineering, process and design.

Bioengineering Undergraduate Curriculum

Sophomore Year

Third Term

- BIOENG 1085 - INTRO TO BIOENGINEERING: SEMINAR
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1
- ENGR 0135 - STATICS & MECHC OF MATERIALS 1
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0290 - DIFFERENTIAL EQUATIONS
- Track Elective

Credits: 17

Fourth Term

- BIOENG 1085 - INTRO TO BIOENGINEERING: SEMINAR
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2
- BIOENG 1210 - BIOENGINEERING THERMODYNAMICS
- BIOENG 1310 - LINEAR SYSTEMS AND ELECTRONICS 1
- BIOENG 1630 - BIOMECHANICS 1-MECHANICAL PRINCIPLES BIOLOGICAL SYSTEMS
- BIOENG 1000 - STATISTICS FOR BIOENGINEERING

Credits: 16

Junior Year

Fifth Term

- BIOENG 1085 - INTRO TO BIOENGINEERING: SEMINAR
- BIOENG 1002 - INTRAMURAL INTERNSHIP
- BIOENG 1220 - BIOTRANSPORT PHENOMENA
- BIOENG 1320 - BIOLOGICAL SIGNALS AND SYSTEMS
- BIOSC 1250 - HUMAN PHYSIOLOGY
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- BIOENG 1241 - SOCIETAL, POLITICAL AND ETHICAL ISSUES IN BIOENGINEERING

Credits: 18

Sixth Term

- BIOENG 1085 - INTRO TO BIOENGINEERING: SEMINAR
- BIOENG 1150 - BIOENG METHODS AND APPLICATIONS
- Biosignals Application or Track Elective

- Imaging Elective or Track Elective
- Track Elective
- Humanities/Social Science Elective

Credits: 16

Senior Year

Seventh Term

- BIOENG 1085 - INTRO TO BIOENGINEERING: SEMINAR
- BIOENG 1160 - BIOENGINEERING DESIGN 1
- Biosignals Application or Track Elective
- Imaging Elective or Track Elective
- Advanced Engineering/Science/Technical Elective
- Humanities/Social Science Elective

Credits: 15

Eighth Term

- BIOENG 1085 - INTRO TO BIOENGINEERING: SEMINAR
- BIOENG 1161 - BIOENGINEERING DESIGN 2
- Biosignals Application or Track Elective
- Imaging Elective or Track Elective
- Advanced Engineering/Science/Technical Elective
- Humanities/Social Science Elective

Credits: 15

Minor

Bioengineering Minor

Undergraduates in other departments can obtain a Minor in Bioengineering by satisfactorily completing (grade of C or better) one BioE seminar and five courses for a total of 16 credits. Students interested in a Bioengineering Minor are required to submit a completed BioE Minor Checklist to the Bioengineering Undergraduate Administrator for course approvals prior to enrolling in BIOENG courses in order to ensure that the requirements for the minor are fulfilled. Approval to use substitute courses to meet minor requirements must be obtained in advance from the Bioengineering Undergraduate Coordinator.

Requirements for the Bioengineering Minor are:

Bioengineering Seminar - 0 Credits

- BIOENG 1086 - BIOENGINEERING SEM FOR MINORS (Register for and attend a minimum of 6 seminar presentations)

Basic Life Science Course - 3 Credits

Acceptable course options include (others may be used with permission)

- BIOSC 1000 - BIOCHEMISTRY
- BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1
- BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2
- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1

- BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2
- BIOSC 1250 - HUMAN PHYSIOLOGY
- BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION
- CHE 1530 - BIOCHEMISTRY FOR ENGINEERS
- CHEM 1810 - CHEMICAL BIOLOGY
- CHEM 1880 - CHEMICAL BIOLOGY FOR ENGINEERS
- HRS 1020 - ANATOMY AND PHYSIOLOGY
- HRS 1023 - HUMAN PHYSIOLOGY

Course in Statistics - 4 Credits

Note: Students who have a major in the Swanson School of Engineering seeking a minor should take ENGR 0020 while students who do not have a major in the Swanson School of Engineering should take STAT 1000.

- ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1
  (SSoE Students)
- STAT 1000 - APPLIED STATISTICAL METHODS
  (non-SSoE Students)

Three BIOENG Elective Courses - 9 Credits

Note: Students must meet prerequisites (or equivalent) to enroll in BIOENG courses.

- BIOENG 1002 - INTRAMURAL INTERNSHIP
- BIOENG 1005 - RADIOFREQUENCY MEDICAL DEVICES
- BIOENG 1024 - MEDICAL PRODUCT DESIGN
- BIOENG 1050 - ARTIFICIAL ORGANS
- BIOENG 1051 - ARTIFICIAL ORGANS 2
- BIOENG 1052 - ARTIFICIAL ORGANS 3
- BIOENG 1150 - BIOENG METHODS AND APPLICATIONS
- BIOENG 1160 - BIOENGINEERING DESIGN 1
- BIOENG 1161 - BIOENGINEERING DESIGN 2
- BIOENG 1210 - BIOENGINEERING THERMODYNAMICS
- BIOENG 1218 - EMERGING BIOMEDICAL TECHNOLOGIES
- BIOENG 1220 - BIOTRANSPORT PHENOMENA
- BIOENG 1255 - DYNAMIC SYSTEMS: PHYSIOLOGICAL PERSPECTIVE
- BIOENG 1310 - LINEAR SYSTEMS AND ELECTRONICS 1
- BIOENG 1320 - BIOLOGICAL SIGNALS AND SYSTEMS
- BIOENG 1330 - BIOMEDICAL IMAGING
- BIOENG 1340 - INTRODUCTION TO MEDICAL IMAGING AND IMAGE ANALYSIS
- BIOENG 1351 - COMPUTER APPLICATIONS IN BIOENGINEERING
- BIOENG 1355 - MEDICAL PRODUCT REGULATION AND REIMBURSEMENT
- BIOENG 1370 - COMPUTATIONAL SIMULATION IN MEDICAL DEVICE DESIGN
- BIOENG 1383 - BIOMEDICAL OPTICAL MICROSCOPY
- BIOENG 1533 - CONTROLLED DRUG DELIVERY
- BIOENG 1580 - BIOMEDICAL APPLICATION FOR SIGNAL PROCESSING
- BIOENG 1586 - QUANTITATIVE SYSTEMS NEUROSCIENCE
- BIOENG 1615 - INTRODUCTION TO NEURAL ENGINEERING
- BIOENG 1620 - INTRODUCTION TO TISSUE ENGINEERING
- BIOENG 1630 - BIOMECHANICS 1-MECHANICAL PRINCIPLES BIOLOGICAL SYSTEMS
- BIOENG 1631 - BIOMECHANICS 2: INTRODUCTION TO BIODYNAMICS AND BIOSOLID MECHANICS
- BIOENG 1632 - BIOMECHANICS 3: BIODYNAMICS OF MOVEMENT
- BIOENG 1633 - BIOMECHANICS 4 - BIOMECHANICS OF ORGANS, TISSUES, AND CELLS
- BIOENG 1680 - BIOMEDICAL APPLICATIONS OF CONTROL
- BIOENG 1810 - BIOMATERIALS AND BIOCOMPATIBILITY

Additional Information

Note: BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1 and BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2 are considered Basic Life Science Courses. Neither can be used to satisfy a BIOENG elective course requirement.

Note: BIOENG 1241 - SOCIETAL, POLITICAL AND ETHICAL ISSUES IN BIOENGINEERING is a humanities/social science course that is restricted to Department of Bioengineering students only. The course cannot be used to satisfy a BIOENG elective course requirement.

Note: BIOENG 1095 - SPECIAL PROJECTS cannot be used to satisfy a BIOENG elective course requirement

Department of Chemical and Petroleum Engineering

Chemical engineering is concerned with processes in which matter and energy undergo change. Despite the historically-inspired name, the material/energy transformations studies by chemical engineers include not only chemical, but also physical and biological changes. The range of concerns, therefore, is so broad that the chemical engineering graduate is prepared for a variety of interesting and challenging employment opportunities. The chemical engineer with his/her strong background in chemical, physical, and biological sciences is found in management, design, operations, and research. The chemical engineer is employed in almost all industries including food, polymers, chemicals, pharmaceuticals, petroleum, medical, materials, and electronics. Since solutions to energy, environmental, medical, and food problems (to name but a few) must surely involve material and/or energy transformations, there will be continued demands for chemical engineers in the future. The chemical engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org

The major objectives of the chemical engineering program are that

1. Graduates will gain employment in professional careers (often in positions of technical expertise in chemical engineering, but also including professions such as medicine, law, business, finance, non-profit organizations, government, education, etc.) and/or enroll in graduate studies.
2. Graduates will be committed to lifelong learning throughout their careers.
3. Graduates will assume positions of leadership.
4. Graduates will recognize the importance of utilizing their knowledge, skills, and initiative for the benefit of society and demonstrate that understanding through their interactions within their community, in government, or in society as a whole.

The chemical engineering faculty have strong interests in transport phenomena, process dynamics, biotechnology, biomedical application, nanotechnology, kinetics, catalysis, thermodynamics, polymers, and energy supply and conversion. Petroleum engineering faculty interests are in fluid displacement in porous media and enhanced oil recovery and reservoir modeling. Courses and research opportunities are available in all of these areas for undergraduate students of demonstrated ability. For more information on these programs, please visit http://www.engineering.pitt.edu/chemical

Major

Chemical Engineering

The following areas of concentration are available for Chemical Engineering students:

Petroleum Concentration

Polymers Concentration

Chemical Engineering Undergraduate Curriculum

Undergraduate chemical engineering courses cover thermodynamics; mass and energy balances; energy, mass, and momentum transfer; unit operations; process dynamics and control; process design; plant and product design; professional practice; and chemical reaction engineering. A cumulative QPA of 2.0 must be achieved in all CHE courses for the student to earn a degree in Chemical Engineering and a minimum grade of C- in CHE 0100, CHE 0200, CHE 0300 and CHE 0400.

In addition, the curriculum provides a sequence of technical electives that makes possible specialization in some of the most important areas in today's society. Among these are the biochemical, petroleum, and polymers areas of concentration. Students may select any combination of technical electives. The appropriate selection of electives, however, can lead to a minor or area of concentration. (See Minors in Engineering.)

Requirements

Third Term

- CHEM 0310 - ORGANIC CHEMISTRY 1
- ChE Composition Requirement - 3 credits
- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- CHE 0100 - FOUNDATIONS OF CHEMICAL ENGR
- CHE 0101 - FOUNDATIONS OF CHE LABORATORY
- CHE 1085 - DEPARTMENTAL SEMINAR

Credits: 17

Fourth Term

- CHEM 0320 - ORGANIC CHEMISTRY 2

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- CHE 1290 - DIFFERENTIAL EQUATIONS IN CHEMICAL ENGINEERING or
- MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

- CHE 0200 - CHEMICAL ENGINEERING THERMODYNAMICS
- CHE 0201 - CHE THERMODYNAMICS LABORATORY
- CHE 0214 - INTRODUCTION TO CHEMICAL PRODUCT DESIGN
- CHE 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Fifth Term

- ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1
- Humanities/Social Science - 3 Credits
- CHE 0300 - TRANSPORT PHENOMENA
- CHE 0301 - TRANSPORT PHENOMENA LABORATORY
- CHE 0314 - TAKING PRODUCTS TO MARKET: THE NEXT STEP IN CHEMICAL PRODUCT DESIGN
- CHE 1085 - DEPARTMENTAL SEMINAR

Credits: 17

Sixth Term

- CHEM 1480 - INTERMEDIATE PHYSICAL CHEMISTRY
- CHE 0400 - REACTIVE PROCESS ENGINEERING
- CHE 0401 - REACTIVE PROCESS ENGINEERING LABORATORY
- Humanities/Social Science - 3 Credits
- CHE 1085 - DEPARTMENTAL SEMINAR

Engineering Elective - 3 Credits

Suggestions:

- ENGR 0022 - MATERIALS STRUCTURE AND PROPERTIES
- ENGR 0135 - STATICS & MECHC OF MATERIALS 1
- ENGR 1700 - INTRODUCTION TO NUCLEAR ENGINEERING

- ENGR 1701 - FUNDAMENTALS OF NUCLEAR REACTORS
- ENGR 1702 - NUCLEAR PLANT TECHNOLOGY
- ENGR 1869 - INTRO ELEC ENGRG FOR NON EE'S

Credits: 15

Seventh Term

- CHE 0500 - SYSTEMS ENGINEERING 1: DYNAMICS AND MODELING
- CHE 0501 - SYSTEMS ENGINEERING 1: DYNAMICS AND MODELING LABORATORY
- Humanities/Social Science - 3 Credits

- CHEM 1810 - CHEMICAL BIOLOGY or
- CHEM 1880 - CHEMICAL BIOLOGY FOR ENGINEERS or
- BIOSC 1000 - BIOCHEMISTRY

- CHE 1085 - DEPARTMENTAL SEMINAR

Advanced Science - 3 Credits

Suggestions:

- CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY
- CHEM 1130 - INORGANIC CHEMISTRY
- CHEM 1600 - SYNTHESIS & CHARCTRZTN POLYMERS
- BIOSC 1500 - CELL BIOLOGY
- BIOSC 1940 - MOLECULAR BIOLOGY

Advanced Labs - Total of 2 Credits

Suggestions:

- CHEM 0260 - INTRODUCTION TO ANALYTICAL CHEMISTRY LAB
- CHEM 1430 - PHYSICAL CHEMISTRY LABORATORY 1
- CHEM 1605 - SYNTH & CHARCTRZTN POLYMERS LAB
- CHEM 0345 - ORGANIC LABORATORY (This is a 2 credit course)

Credits: 17

Eighth Term

- CHE 0613 - SYSTEM ENGINEERING 2: PROCESS DESIGN
- CHE 0602 - CHEMICAL ENGINEERING SAFETY AND ETHICS
- ChE or PETE Elective - 3 Credits
- Humanities/Social Science - 3 Credits
- Professional Elective - 3 Credits
- CHE 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Total Credits Required: 132

Minor

Chemical Engineering Minor

This minor is available to all students (except Chemical Engineering undergraduates). A cumulative QPA of 2.0 must be achieved for these courses in order for the student to be awarded the Minor in Chemical Engineering. The student must receive a passing grade (C- or higher) in all courses to receive the minor. These courses would have to be completed or taken over and passed prior to the student receiving the minor. Prerequisites include General Chemistry 1 and 2 and MATH 0220 and MATH 0230.

Requirements

For students outside the Swanson School of Engineering, or for Engineering majors that are not required to take a Thermodynamics and Transport Phenomena course in their major, the following three courses and their recitations and labs are required (a total of 21 credits):

- CHE 0100 - FOUNDATIONS OF CHEMICAL ENGR
- CHE 0101 - FOUNDATIONS OF CHE LABORATORY
- CHE 0200 - CHEMICAL ENGINEERING THERMODYNAMICS
- CHE 0201 - CHE THERMODYNAMICS LABORATORY
- CHE 0300 - TRANSPORT PHENOMENA
- CHE 0301 - TRANSPORT PHENOMENA LABORATORY

  For students with the Swanson School of Engineering whose major does require that they take both a Thermodynamics and Transport Phenomena course (i.e., BioE and ME majors), the following two courses and their recitations and labs are required (a total of 13 credits).
- CHE 0100
- CHE 0101
- CHE 0400
- CHE 0401
  Note, both the Transport Phenomena and Thermodynamics courses must be completed prior to enrolling in CHE 0400.

Petroleum Engineering Minor

This minor is available to all undergraduate engineers.

The successful completion of four PETE courses is required for the minor. A cumulative QPA of 2.0 must be achieved for these courses in order for the student to be awarded the Minor in Petroleum Engineering. The student must receive a passing grade (D- or higher) in all courses to receive the minor. These courses would have to be completed or taken over and passed prior to the student receiving the minor. Prerequisites: MATH 0290 or CHE 1290 or equivalent and CHE 0100 or approval of PETE program director.

Requirements:

Choose four courses from the following list:

- PETE 1160 - PETROLEUM RESERVOIR ENGINEERING
- PETE 1201 - RECOVERY OF OIL BY WATERFLOODING
- PETE 1204 - ENHANCED OIL RECOVERY PROCESSES
- PETE 1205 - PETROLEUM PRODUCTION ENGINEERING
- PETE 1207 - PETROLEUM AND NATURAL GAS PROCESSING
- PETE 1208 - PETROLEUM DRILLING AND WELL COMPLETION
- PETE 1097 - SPECIAL PROJECTS
- PETE 1209 - HYDRAULIC FRACTURING MECHANICS AND APPLICATIONS (Cross-listed as CEE 1809)

  ** PETE 1097 projects can be conducted with a professor doing petroleum engineering related studies (Enick, Morsi) and may be replaced by two additional 3 credit PETE courses or a combination of PETE 1097 and a single 3 credit PETE course.

Polymer Engineering Minor

This minor is available to all undergraduate engineering students. The successful completion of six of the following courses is required for the minor. A cumulative QPA of 2.0 must be achieved for these courses in order for the student to be awarded the Minor in Polymer Engineering. The student

must receive a passing grade (D- or higher) in all courses to receive the minor. These courses would have to be completed or taken over and passed prior to the student receiving the minor. Prerequisites include General Chemistry 1 and 2, and MATH 0220 and 0230.

Core Courses

- CHE 1754 - PRINCIPLES OF POLYMER ENGINEERNG
- CHEM 1600 - SYNTHESIS & CHARCTRZTN POLYMERS with lab
- CHEM 1605 - SYNTH & CHARCTRZTN POLYMERS LAB

Required Chemistry Courses

- CHEM 0310 - ORGANIC CHEMISTRY 1
- CHEM 0320 - ORGANIC CHEMISTRY 2

Two Research Projects with Polymer Content (For a Total of 6 Credits)

- CHE 1097 - SPECIAL PROJECT
- CHEM 1710 - UNDERGRADUATE RESEARCH
  Students can take CHE 1097 or CHEM 1710 or a combination of both, totaling 6 credits.

Department of Civil and Environmental Engineering

The University of Pittsburgh is proud of its history and tradition in civil and environmental engineering education, reinforced by a faculty who are dedicated to their students. The curriculum prepares students to tackle today's most eminent engineering, environmental and societal challenges.

The department offers a Bachelor of Science in Engineering degree that may be obtained by majoring in civil engineering or environmental engineering. The civil engineering major has been continuously accredited by ABET since its inception in 1936. The environmental engineering major was established in 2015 in response to strong demand from students, industry and government agencies and will seek ABET accreditation in the Fall of 2017. The Department also offers minors in civil engineering and environmental engineering to students majoring in other disciplines.

Civil and environmental engineers are concerned with safeguarding life, health, and property while promoting the general welfare of society. They are the designers of the public and private works that affect large segments of the population. However, because problems of expanding population and increasing human needs that confront our civilization, the responsibility of civil and environmental engineers extends beyond mere physical structures into the social, political, and economic welfare of the United States and other countries. In brief, the work of the civil and environmental engineer has a significant impact on the quality of life in all areas of modern society.

Major

Civil Engineering

The following areas of concentration are available for Civil Engineering students:

Construction Management

Environmental Engineering

Geotechnical Engineering

Structural Engineering

Transportation Engineering

Water Resources Engineering

The civil engineer may focus in environmental control and in the development or redevelopment of a geographic area through overall planning, as well as in the design, construction, and operation of structures and facilities for public and private use. Included in the broad field of civil engineering are the following: buildings, bridges, and industrial installations; soil mechanics and foundations; transportation, including highways, traffic, airports, and harbors; hydraulic engineering, including irrigation; water resources, including power plants and dams; water supply; waste disposal; air pollution; hazardous and solid wastes; and environmental sanitation. Modern-day requirements have necessitated involvement in the medical and dental fields, oceanography, polar exploration, energy resources, and the space effort.

The curriculum focuses on the electives available for designing individualized programs suited to the student's career goals. Emphasis is placed on societal needs and ways of meeting those needs. Thus, graduates are prepared to begin work in any of the several branches of civil engineering or to continue their education at the graduate level.

Civil Engineering Undergraduate Curriculum

Third Term

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- ENGR 0131 - STATICS FOR CIVIL AND ENVIRONMENTAL ENGINEERS
- IE 1040 - ENGINEERING ECONOMIC ANALYSIS
- CEE 1503 - INTRO TO ENVIRONMENTAL ENGRNG
- Science Elective - 3 Credits
- CEE 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Fourth Term

- MATH 0290 - DIFFERENTIAL EQUATIONS
- ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1
- ENGR 0141 - MECHANICS OF MATERIALS CIVIL AND ENVIRONMENTAL ENGINEERS
- CEE 0109 - COMPUTER METH IN CIVIL ENGRG 1
- CEE 1105 - MATERIALS OF CONSTRUCTION
- CEE 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Fifth Term

- CEE 1330 - INTRODUCTION TO STRUCTURAL ANALYSIS
- CEE 1402 - FLUID MECHANICS
- CEE 1811 - PRINCIPLES OF SOIL MECHANICS
- ENGR 0151 - DYNAMICS CIVIL & ENVRN ENGNRS
- Social Science Elective - 3 Credits
- CEE 1703 - TRANSPORTATION ENGINEERING
- CEE 1085 - DEPARTMENTAL SEMINAR

Credits: 18

Sixth Term

- CEE 1200 - CONSTRUCTION MANAGEMENT

- CEE 1609 - LIFE CYCLE ASSESSMENT METHODS AND TOOLS or
- CEE 1610 - ENGINEERING AND SUSTAINABLE DEVELOPMENT or
- CEE 1618 - DESIGN FOR THE ENVIRONMENT

- CEE 1412 - INTRODUCTION TO WATER RESOURCES ENGINEERING
- Social Science Elective - 3 Credits
- CEE Design Elective #1 - 3 Credits*
- CEE 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Seventh Term

- CEE-Design Elective #2 - 3 Credits*
- CEE Elective - 3 Credits*
- CEE Elective - 3 Credits*
- Engineering Elective - 3 Credits
- Humanities/Social Science Elective - 3 Credits
- CEE 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Eighth Term

- Humanities/Social Science Elective - 3 Credits

- CEE 1233 - CONSTRUCTION DESIGN PROJECT or
- CEE 1333 - STRUCTURAL DESIGN PROJECT or
- CEE 1433 - WATER RESOURCES DESIGN PROJECT or
- CEE 1533 - ENVRL ENGR DESIGN PROJECT or
- CEE 1733 - TRANSPORTATION DESIGN PROJECT or
- CEE 1833 - GEOTECHNICAL DESIGN PROJECT

- CEE-Elective - 3 Credits**
- CEE-Elective - 3 Credits**
- CEE-Elective - 3 Credits**
- CEE 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Note:

*Design Electives are: (CEE 1335), (CEE 1410 or CEE 1401), (CEE 1505, CEE 1513 or CEE 1515), (CEE 1714 , CEE 1715, CEE 1717, CEE 1718, CEE 1821, or CEE 2814), (CEE 1700 or CEE 1730). One course from each group is required.

**Any non-required CEE undergraduate courses, Mining Engineering Courses with the ENGR classification, 2000 level CEE graduate courses - and any ENGR course offered by the CEE Department are suitable for CEE Electives.

Minimum Grade Requirements

ENGR 0131 , ENGR 0141, CEE 1330, CEE 1402, CEE 1503, CEE 1811, and all design electives must be passed with a grade of "C" or higher.

Environmental Engineering

Environmental engineers are concerned with safeguarding life, health, and the environment while promoting society's general welfare. They are the designers of the public and private works that affect all segments of the population. The responsibility of the environmental engineer extends beyond mere physical structures into the social, political, and economic welfare of this and other countries. In brief, the work of the environmental engineer has a significant impact on the quality of life in all areas of modern society.

Environmental engineers deal in environmental control and in the development or redevelopment of a geographic area through overall planning, as well as in the design, construction, and operation of structures and facilities for public and private use (infrastructure). The field includes water supply systems, waste disposal, air and water pollution, and environmental remediation. The environmental engineering program at the University of Pittsburgh is a new program with the first B.S. degree being awarded by the Department in 2017.

The program begins with studies in the humanities, social sciences, physical sciences, and mathematics, and proceeds to the fundamental aspects of environmental engineering. The curriculum focuses on the electives available for designing individualized programs suited to the student's career goals. Emphasis is placed on societal and environmental needs as well as ways of meeting those needs. Thus, the graduate is prepared to begin work in any of the several branches of environmental engineering or to continue his or her education at the graduate level.

Environmental Engineering Undergraduate Curriculum

The environmental engineering major is designed for the students who enter the program at the end of their freshman year. Qualified transfer students (3.000 GPA) are accepted subject to space available. In addition, summer programs are available primarily to assist students who are not taking the structured curriculum on schedule or students participating in the cooperative study program. Students are expected to complete all prerequisite courses before advancing to the next term.

Third Term

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- ENGR 0131 - STATICS FOR CIVIL AND ENVIRONMENTAL ENGINEERS
- IE 1040 - ENGINEERING ECONOMIC ANALYSIS
- CEE 1503 - INTRO TO ENVIRONMENTAL ENGRNG
- Earth Science Elective - 3 credits
- CEE 1085 - DEPARTMENTAL SEMINAR

Total Credits: 16

Fourth Term

- MATH 0290 - DIFFERENTIAL EQUATIONS
- ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1

- CEE 1504 - CHEMISTRY IN ENVIRONMENTAL ENGINEERING or
- CHEM 0310 - ORGANIC CHEMISTRY 1

- ENGR 0141 - MECHANICS OF MATERIALS CIVIL AND ENVIRONMENTAL ENGINEERS

- CEE 0109 - COMPUTER METH IN CIVIL ENGRG 1 or
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG or
- GEOL 1006 - ENVIRONMENTAL MODELING

- CEE 1085 - DEPARTMENTAL SEMINAR

Total Credits: 16

Fifth Term

- BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1
- CEE 1402 - FLUID MECHANICS
- CEE 1811 - PRINCIPLES OF SOIL MECHANICS
- CEE 1203 - CONSTRUCT PROFSSN DEVELOPMENT
- Social Science Elective - 3 credits
- Social Science Elective - 3 credits
- CEE 1085 - DEPARTMENTAL SEMINAR

Total Credits: 18

Sixth Term

- CEE 1520 - MATERIAL AND ENERGY BALANCES IN ENVIRONMENTAL ENGINEERING

- CEE 1609 - LIFE CYCLE ASSESSMENT METHODS AND TOOLS or
- CEE 1610 - ENGINEERING AND SUSTAINABLE DEVELOPMENT or
- CEE 1618 - DESIGN FOR THE ENVIRONMENT

- CEE 1412 - INTRODUCTION TO WATER RESOURCES ENGINEERING
- CEE 1513 - ENVIRONMENTAL ENGRNG PROCESSES
- CEE 1523 - ENVIRONMENTAL ENGINEERING LAB
- CEE 1085 - DEPARTMENTAL SEMINAR

Total Credits: 15

Seventh Term

- CEE 1505 - WATER TREATMENT AND DISTRIBUTION SYSTEM DESIGN or
- CEE 1515 - WASTEWATER COLLECTION AND TREATMENT PLANT DESIGN

- CEE 1522 - FATE AND TRANSPORT IN ENVIRONMENTAL ENGINEERING
- Environmental Program Elective - 3 credits
- Environmental Program Elective - 3 credits
- Humanities/Social Science Elective - 3 credits
- CEE 1085 - DEPARTMENTAL SEMINAR

Total Credits: 15

Eighth Term

- Humanities/Social Science Elective - 3 credits
- CEE 1533 - ENVRL ENGR DESIGN PROJECT
- Civil Engineering Elective - 3 credits

- CEE 1401 - OPEN CHANNEL HYDRAULICS DESIGN or
- CEE 1410 - WATER RESOURCES ENGINEERING DESIGN

- Civil Engineering Elective - 3 credits
- CEE 1085 - DEPARTMENTAL SEMINAR

Total Credits: 15

Minimum Grade Requirements

- ENGR 0131 and ENGR 0141 must be passed with a grade of "C" or higher.
- CEE 1503, CEE 1504, CEE 1505/CEE 1515 , CEE 1513, CEE 1520, CEE 1522 and CEE 1523 must be passed with a grade of "C" or higher.

Minor

Architecture-Design Minor

The Architecture-Design minor consists of 18 credits, distributed as follows:

Requirements for the minor

The minor in Architecture - Design provides an option for students majoring in fields such as Civil Engineering, Environmental Studies, History, Studio Arts, Urban Studies and for whom course work in architectural design and history will provide additional breadth in their studies of the built environment. The minor requires that students complete 18 credits, 12 of which are studio-based design courses and six of which will provide historical and theoretical background for thinking about architecture and the built environment.

Foundational course in architecture

- ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT

Two courses in architectural design

- ARC 0201 - FOUNDATIONS STUDIO 1
- ARC 1201 - ARCHITECTURE DESIGN STUDIO 1

Students must earn a letter grade of C or higher in ARC 0201 - FOUNDATIONS STUDIO 1 to enroll in ARC 1201 - ARCHITECTURE DESIGN STUDIO 1.

One course in architectural history

Students in SSOE are encouraged to fill this requirement with ARC 0150.

- ARC 0116 - MODERN ARCHITECTURE
- ARC 0150 - INTRODUCTION TO WESTERN ARCHITECTURE
- ARC 0153 - MEDIEVAL ARCHITECTURE
- ARC 0210 - SPECIAL TOPICS-ARCHITECTURE
- ARC 0300 - INTRODUCTION TO HISTORIC PRESERVATION
- ARC 1118 - ARCHITECTURE SINCE 1945
- ARC 1136 - EARLY AMERICAN ARCHITECTURE
- ARC 1137 - AMERICAN ARCHITECTURE SINCE INDUSTRIALIZATION
- ARC 1156 - HIGH RENAISSANCE ARCHITECTURE
- ARC 1158 - ARCHITECTURE AND ENLIGHTENMENT
- ARC 1160 - ARCHITECTURE: IMAGE, TEXT, THEORY
- ARC 1181 - PITTSBURGH ARCHITECTURE/URBANISM
- ARC 1191 - ARCHITECTURE AND THE CITY IN CENTRAL EUROPE: 19TH AND 20TH CENTURIES
- ARC 1330 - GLOBAL PRESERVATION
- HAA 0460 - ART IN PUBLIC: INCLUSION , IDENTITY, AND ACTIVISM
- HAA 1680 - JAPAN: ARTIST AND CITY

Two co-requisites

- ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1
- SA 0130 - DRAWING STUDIO 1

ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1 may be waived for students who have taken a course in AutoCAD in high school or an equivalent course in the Department of Civil Engineering in the Swanson School of Engineering. CEE 0109 - COMPUTER METH IN CIVIL ENGRG 1 satisfies this requirement.

SA 0130 - DRAWING STUDIO 1 may be waived for students who have taken material or studio art courses in high school.

Civil Engineering Minor

The Department of Civil and Environmental Engineering offers a Minor in Civil Engineering to B.S. degree students in other engineering or science departments of the University of Pittsburgh. The applicant must have completed the Swanson School of Engineering common Freshman year courses

or their equivalent, plus the following courses which are prerequisites for Civil and Environmental Engineering (CEE) courses, each with a grade of "C" or better.

- Prerequisite: Math 240 and Math 290
- ENGR 0131 or ENGR 0135
- ENGR 0141 or ENGR 0145

Students from other engineering departments must be in good standing. Students from outside the Swanson School of Engineering must have a an overall QPA of 2.5 or greater.

The Minor requires the completion of a minimum of 18 credits of course work in civil engineering.

Course Requirements

Three out of the following introductory courses.

- CEE 1200 - CONSTRUCTION MANAGEMENT
- CEE 1330 - INTRODUCTION TO STRUCTURAL ANALYSIS
- CEE 1402 - FLUID MECHANICS
- CEE 1503 - INTRO TO ENVIRONMENTAL ENGRNG
- CEE 1703 - TRANSPORTATION ENGINEERING
- CEE 1811 - PRINCIPLES OF SOIL MECHANICS

Three Electives from the Following Six Categories Related to the Introductory Courses, Must be Taken from the List Below

Construction Management (prerequisites CEE 1200):

- CEE 1203 - CONSTRUCT PROFSSN DEVELOPMENT
- CEE 2201 CONSTRUCTION COST ENGINEERING
- CEE 2202 CONSTRUCTION SCHEDULING
- CEE 2204 CONSTRUCTION LAW & RISK MGMNT
- CEE 2205 CONSTRCT FINANCE & COST CONTRL
- CEE 2206 CONSTRCT & COST OF ELEC SUPPLY
- CEE 2207 CONSTRCT & CST OF MECHL SYSTMS

Structural Engineering (prerequisites CEE 1330):

- CEE 1340 - CONCRETE STRUCTURES 1
- CEE 1341 - STEEL STRUCTURES 1
- CEE 1370 - INTRODUCTION TO NONDESTRUCTIVE EVALUATION AND STRUCTURAL HEALTH MONITORING
- CEE 2330 ADVANCED STRUCTURAL ANALYSIS

Water Resources Engineering (prerequisite CEE 1402):

- CEE 1410 - WATER RESOURCES ENGINEERING DESIGN
- CEE 1412 - INTRODUCTION TO WATER RESOURCES ENGINEERING
- CEE 1401 - OPEN CHANNEL HYDRAULICS DESIGN

Environmental Engineering (prerequisite CEE 1503):

- CEE 1504 - CHEMISTRY IN ENVIRONMENTAL ENGINEERING
- CEE 1513 - ENVIRONMENTAL ENGRNG PROCESSES
- CEE 1514 - ENVIRONMENTAL IMPACT ASSESSMENT
- CEE 1520 - MATERIAL AND ENERGY BALANCES IN ENVIRONMENTAL ENGINEERING
- CEE 1522 - FATE AND TRANSPORT IN ENVIRONMENTAL ENGINEERING

- CEE 1523 - ENVIRONMENTAL ENGINEERING LAB
- CEE 2500 ENVRNMNTL ENGRG MICROBIOL
- CEE 2501 ENVIRONMENTAL ENGRNG CHEMISTRY
- CEE 2502 PHYSCL-CHMCL PRIN IN ENV ENGRG

Transportation Engineering (prerequisite CEE 1703):

- CEE 1700 - TRAFFIC MANAGEMENT AND OPERATIONS
- CEE 1710 - TRAFFIC CONTROL SYSTEMS
- CEE 1711 - ADVANCED TRANSPORTATION MANAGEMENT STRATEGIES
- CEE 1714 - PAVEMENT DESIGN AND ANALYSIS
- CEE 1715 - PAVEMENT MAINTENANCE AND REHAB
- CEE 1717 - COMPONENTS, PROPERTIES AND DESIGN OF PORTLAND CEMENT CONCRETE
- CEE 1718 - ADVANCED CONSTRUCTION AND BITUMINOUS MATERIALS
- CEE 1720 - URBAN TRANSPORTATION PLANNING
- CEE 1725 - PUBLIC TRANSPORTATION SYSTEMS
- CEE 1730 - HIGHWAY ENGINEERING

Geotechnical Engineering (prerequisite CEE 1811):

- CEE 1800 - ENGINEERING GEOLOGY
- CEE 1821 - FOUNDATION ENGINEERING
- CEE 2801 ADVANCED SOIL MECHANICS
- CEE 2802 COMPTR METH IN GEOTECHNCL ENGR

Notes:

1. Environmental Engineering Majors seeking the minor may NOT use CEE 1402, 1503 or 1811 courses to satisfy the requirements.
2. Environmental Engineering Majors seeking the minor may NOT use CEE 1203, 14XX, 15XX, 24XX and 25XX courses to satisfy the requirements.

Application:

Early application is advised so that the applicant can be assigned to an advisor in the Department of Civil and Environmental Engineering.

To apply obtain and submit the completed application form with copy of academic record to: Dr. Leonard W. Casson, Undergraduate Coordinator,742 Benedum Hall, Tel. 412-624-9870; casson@pitt.edu.

Environmental Engineering Minor

The Department of Civil and Environmental Engineering offers a Minor in Environmental Engineering to B.S. degree students in other engineering or science departments within the University of Pittsburgh. The minor requires the completion of a minimum of 15 credits of course work in the environmental area. This minor is not available to Civil Engineering Majors in the Department.

The completion of the Environmental Engineering Minor will provide the student with a significant career advantage. Engineers and scientists from diverse backgrounds are needed in the control and management of our environment

Course Requirements

(Any deviation or substitution must be approved by the CEE Undergraduate Coordinator):

- CEE 1412 - INTRODUCTION TO WATER RESOURCES ENGINEERING
- CEE 1503 - INTRO TO ENVIRONMENTAL ENGRNG
- CEE 1513 - ENVIRONMENTAL ENGRNG PROCESSES

Two of the following courses:

- CEE 1504 - CHEMISTRY IN ENVIRONMENTAL ENGINEERING
- CEE 1505 - WATER TREATMENT AND DISTRIBUTION SYSTEM DESIGN
- CEE 1514 - ENVIRONMENTAL IMPACT ASSESSMENT
- CEE 1515 - WASTEWATER COLLECTION AND TREATMENT PLANT DESIGN
- CEE 1520 - MATERIAL AND ENERGY BALANCES IN ENVIRONMENTAL ENGINEERING
- CEE 1522 - FATE AND TRANSPORT IN ENVIRONMENTAL ENGINEERING
- CEE 1609 - LIFE CYCLE ASSESSMENT METHODS AND TOOLS
- CEE 1610 - ENGINEERING AND SUSTAINABLE DEVELOPMENT
- CEE 1618 - DESIGN FOR THE ENVIRONMENT
- CEE 1996 - SPECIAL PROJECTS

Application:

It is strongly suggested that interested undergraduates contact an environmental engineering faculty member for guidance once they decide they may be interested in the environmental minor. All students should obtain and submit a completed formal application form with copy of academic record to: Dr. Casson, Undergraduate Academic Coordinator, 742 Benedum Hall, Telephone 412-624-9868.

Department of Electrical and Computer Engineering

Computer Engineering

Computer engineers are active in and in demand for all phases of technology research, design and development, testing, manufacturing, sales, and management of computer technologies. In addition, many successful leaders in other professions, such as law, medicine, and business, pursue an undergraduate education in computer engineering as preparation for later professional study. Thus the undergraduate curriculum provides preparation in both mathematics and physical sciences, coupled with coverage of all aspects of computing, software, hardware, design, and application. The program's flexible elective structure offers the student considerable opportunity for professional specialization, area specialization within the computing discipline, or interdisciplinary broadening. The computer engineering program is accredited by the Engineering Accreditation Commission of ABET. http://www.abet.org. For more information about the program, contact coeundergrad@pitt.edu or see http://www.engineering.pitt.edu/Computer/

Electrical Engineering

Electrical Engineering is the application of math and science to the design, manufacture, use and operation of electrical processes, devices, machines, and systems. Electrical and electronics engineers build circuits and systems that use and/or transform electricity for a practical purpose. Electrical engineering is a very broad discipline that impacts public welfare and safety, as well as health, healthcare, communication, transportation, computing, and leisure.

Major

Computer Engineering

For students who enrolled prior to Fall 2019, please refer to the Archived Catalogs, and select the academic year in which you began to view your program requirements.

Computer Engineering Undergraduate Curriculum

The overall objective of the computer engineering (CoE) program is to prepare individuals to be successful and lead lives of impact in whatever path they choose to pursue in the 21st century global economy. This includes those who move into practice within the computer engineering discipline

either through employment in industry or government, entrepreneurship, those who move on to advanced computer study and research in graduate school, or those that move into other professions such as law, business, or management.

Building upon the Swanson School of Engineering freshmen program, a common and comprehensive year of study is delivered to sophomore computer engineering (CoE) and electrical engineering (EE) students. The sophomore year features four tracks, including two-course sequences in analog hardware, digital hardware, software, and applied math. These eight courses prepare students to continue as juniors in their specific program (CoE or EE) with foundational strength.

During the CoE junior year, students complete six core courses unique to CoE (computer architecture, advanced digital design, embedded systems, computer networks, information security, systems and project engineering) and a core course common to both programs (junior design fundamentals). Broad flexibility is provided in the senior year, including four ECE electives, three technical electives, and one general elective, providing many dozens of options.

The CoE program is designed to build on foundational engineering strength developed during the freshman year, extend with broad ECE fundamentals in the sophomore year, further extend and deepen with CoE fundamentals in the junior year, and then diversify for career exploration and specialization in the senior year. Our graduates will be among the best prepared computer engineers in the nation for impactful careers and post-graduate studies in one of the most exciting and thriving professions of STEM.

Third Term

- ECE 0101 - LINEAR CIRCUITS AND SYSTEMS
- ECE 0201 - DIGITAL CIRCUITS AND SYSTEMS
- ECE 0301 - ECE PROBLEM SOLVING WITH C++
- ECE 0401 - ECE ANALYTICAL METHODS
- Communication Skills Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 17

Fourth Term

- ECE 0102 - MICROELECTRONIC CIRCUITS
- ECE 0202 - EMBEDDED PROCESSORS AND INTERFACING
- ECE 0302 - DATA STRUCTURES AND ALGORITHMS
- ECE 0402 - SIGNALS, SYSTEMS, & PROBABILITY
- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 17

Fifth Term

- MATH 0480 - APPLIED DISCRETE MATHEMATICS
- ECE 1110 - COMPUTER ORGANIZATION AND ARCHITECTURE
- ECE 1150 - COMPUTER NETWORKS
- ECE 1175 - EMBEDDED SYSTEMS DESIGN
- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 16

Sixth Term

- ECE 1140 - SYSTEMS AND PROJECT ENGINEERING
- ECE 1155 - INFORMATION SECURITY
- ECE 1195 - ADVANCED DIGITAL DESIGN

- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR
- ECE 1895 - JUNIOR DESIGN FUNDAMENTALS

Credits: 16

Seventh Term

- ECE Elective - 3 credits
- ECE Elective - 3 credits
- ECE Elective - 3 credits
- Technical Elective - 3 credits
- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 15

Eighth Term

- ECE Elective - 3 credits
- Technical Elective - 3 credits
- Technical Elective - 3 credits
- Open Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR
- ECE 1896 - SENIOR DESIGN PROJECT *

Credits: 15

Note:

*Students may take ENGR 1050 - PRODUCT REALIZATION to fulfill the Senior Design Project requirement with approval from the Undergraduate Coordinator.

Electives

ECE Electives

Students must complete at least four ECE Elective courses from the following list:

- ECE 1120 - HARDWARE DESIGN METHODOLOGIES 1
- ECE 1161 - EMBEDDED COMPUTER SYSTEM DESIGN 2
- ECE 1165 - DEPENDABLE COMPUTER ARCHITURE
- ECE 1166 - PARALLEL COMPUTER ARCHITECTURE
- ECE 1170 - SPECIAL TOPICS: COMPUTER
- ECE 1180 - COMPUTATIONAL MODELING AND SIMULATION FOR ENGINEERS
- ECE 1188 - CYBER-PHYSICAL SYSTEMS
- ECE 1192 - INTRODUCTION TO VLSI DESIGN
- ECE 1193 - ADVANCED VLSI DESIGN
- ECE 1212 - ELECTRONIC CIRCUIT DESIGN LAB
- ECE 1215 - ELECTROACOUSTICS AND AUDIOELECTRONICS
- ECE 1232 - INTRO LASERS & OPTCL ELECTNC
- ECE 1238 - DIGITAL ELECTRONICS
- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- ECE 1250 - NANOTECHNOLOGY & NANO-ENGINEERING

- ECE 1251 - MICRO AND NANO DEVICE FABRICATION LABORATORY
- ECE 1259 - ELECTROMAGNETICS
- ECE 1266 - APPLICTIONS OF FIELDS & WAVES
- ECE 1270 - SPECIAL TOPICS: FUNDAMENTALS ELECTRONICS PROTOTYPING
- ECE 1286 - ANAL & DSGN ANLG INTGRTD CRCT
- ECE 1390 - INTRO TO IMAGE PROCESSING
- ECE 1395 - INTRODUCTION TO MACHINE LEARNING
- ECE 1472 - ANALOG COMMUNICATION SYSTEMS
- ECE 1473 - DIGITAL COMMUNICATION SYSTEMS
- ECE 1560 - DIGITAL SIGNAL PROCESSING
- ECE 1562 - DIGITAL AND ANALOG FILTERS
- ECE 1570 - SPECIAL TOPICS
- ECE 1673 - LINEAR CONTROL SYSTEMS
- ECE 1701 - FUNDAMENTALS OF ELECTRIC POWER ENGINEERING
- ECE 1710 - POWER DISTRIBUTION SYSTEMS ENGINEERING AND SMART GRIDS
- ECE 1750 - POWER ELECTRONICS CONVERSION THEORY
- ECE 1769 - POWER SYSTEM ANALYSIS 1
- ECE 1770 - SPECIAL TOPICS: ELECTRONIC MICROPROCESSOR SYSTEMS
- ECE 1771 - ELECTRIC MACHINERY
- ECE 1773 - POWER GENERATION, OPERATION, AND CONTROL
- ECE 1775 - POWER QUALITY
- all 2000/3000 level ECE graduate courses

Communication Skills Electives

Students must complete at least one Communication Skills Elective course from the following list:

- COMMRC 0500 - ARGUMENT
- COMMRC 0510 - DEBATE
- COMMRC 0520 - PUBLIC SPEAKING
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- COMMRC 0540 - DISCUSSION
- COMMRC 0550 - SPEECH COMPOSITION
- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION
- COMMRC 1106 - SMALL GROUP COMMUNICATION
- COMMRC 1109 - NONVERBAL COMMUNICATION
- COMMRC 1170 - CROSS CULTURAL COMMUNICATION
- COMMRC 1520 - ADVANCED PUBLIC SPEAKING
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- ENGCMP 0401 - WRITTEN PROFESSIONAL COMMUNICATION: TOPICS IN DIVERSITY
- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0440 - CRITICAL WRITING
- ENGCMP 0450 - RESEARCH WRITING
- ENGCMP 0510 - NARRATIVES OF THE WORKPLACE
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0521 - WRITING WITH DATA
- ENGCMP 0530 - WRITING FOR THE SCIENCES
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 0641 - WRITING FOR CHANGE
- ENGCMP 1099 - THE LANGUAGE OF POLICY AND POWER: TOPICS IN DIVERSITY
- ENGCMP 1100 - LANGUAGE OF BUSINESS AND INDUSTRY
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1104 - CORPORATE STORYTELLING
- ENGCMP 1111 - PROFESSIONAL WRITING IN GLOBAL CONTEXTS
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA

- ENGCMP 1250 - ADVANCED TOPICS PUBLIC/PROFESSIONAL WRITING
- ENGCMP 1400 - GRANT WRITING
- ENGCMP 1401 - WRITING FOR FUNDRAISING AND DEVELOPMENT
- ENGCMP 1420 - WRITING PROPOSALS FOR BUSINESS
- ENGCMP 1510 - WRITING WITH STYLE
- ENGR 1010 - COMMUNICTN SKILLS FOR ENGINEERS

Humanities/Social Science Electives

Students must complete at least four Humanities/Social Science Elective courses from a list of Approved Electives as part of the Computer Engineering curriculum. (Note: students will complete a total of six Humanities/Social Science Elective courses, but two are completed as part of the First-Year Program curriculum, and four are completed as part of the Computer Engineering curriculum.)

Open Electives

Students must complete at least one Open Elective course. Any course that is not of a similar nature to, or lower level than, a required or previously taken course can be used to fulfill this requirement. Three credits of Physical Education, or three credits of Band, ROTC, or Chorus may also be used as an Open Elective. Three credits of Co-op may also be used to fulfill the Open Elective.

Technical Electives

Students must complete at least three Technical Elective courses from the ECE Department's list of approved Technical Electives. Technical Electives can be any ECE elective or any other School of Engineering course, which has not been used to fulfill another requirement or does not substantially duplicate other required course material. Most science and math courses that can be taken by students majoring in those departments can be used as Technical Electives.

Electrical Engineering

For students who enrolled prior to Fall 2019, please refer to the Archived Catalogs, and select the academic year in which you began to view your program requirements.

The following areas of concentration are available for Electrical Engineering students:

Electronics (Circuits and Devices)

Communications and Signal Processing

Digital Systems

Electric Power

Electrical Engineering Undergraduate Curriculum

The overall objective of the electrical engineering (EE) program is to prepare individuals to be successful and lead lives of impact in whatever path they choose to pursue in the 21st century global economy. This includes those who move into practice within the electrical engineering discipline either through employment in industry or government, entrepreneurship, those who move on to advanced computer study and research in graduate school, or those that move into other professions such as law, business, or management.

Building upon the Swanson School of Engineering freshmen program, a common and comprehensive year of study is delivered to sophomore computer engineering (CoE) and electrical engineering (EE) students. The sophomore year features four tracks, including two-course sequences in analog hardware, digital hardware, software, and applied math. These eight courses prepare students to continue as juniors in their specific program (CoE or EE) with foundational strength.

During the EE junior year, students complete six core courses unique to EE (electric power, electromagnetics, linear control systems, digital signal processing, semiconductor devices and advanced analog design) and a core course common to both programs (junior design fundamentals). Broad flexibility is provided in the senior year, including four ECE electives, three technical electives, and one general elective, providing many dozens of options.

The EE program is designed to build on foundational engineering strength developed during the freshman year, extend with broad ECE fundamentals in the sophomore year, further extend and deepen with EE fundamentals in the junior year, and then diversify for career exploration and specialization in the senior year. Our graduates will be among the best prepared computer engineers in the nation for impactful careers and post-graduate studies in one of the most exciting and thriving professions of STEM.

Third Term

- ECE 0101 - LINEAR CIRCUITS AND SYSTEMS
- ECE 0201 - DIGITAL CIRCUITS AND SYSTEMS
- ECE 0301 - ECE PROBLEM SOLVING WITH C++
- ECE 0401 - ECE ANALYTICAL METHODS
- Communications Skills Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 17

Fourth Term

- ECE 0102 - MICROELECTRONIC CIRCUITS
- ECE 0202 - EMBEDDED PROCESSORS AND INTERFACING
- ECE 0302 - DATA STRUCTURES AND ALGORITHMS
- ECE 0402 - SIGNALS, SYSTEMS, & PROBABILITY
- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 17

Fifth Term

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- ECE 1212 - ELECTRONIC CIRCUIT DESIGN LAB
- ECE 1560 - DIGITAL SIGNAL PROCESSING
- ECE 1701 - FUNDAMENTALS OF ELECTRIC POWER ENGINEERING
- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 16

Sixth Term

- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- ECE 1259 - ELECTROMAGNETICS
- ECE 1673 - LINEAR CONTROL SYSTEMS
- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR
- ECE 1895 - JUNIOR DESIGN FUNDAMENTALS

Credits: 16

Seventh Term

- ECE Elective - 3 credits
- ECE Elective - 3 credits
- ECE Elective - 3 credits
- Technical Elective - 3 credits
- Humanities/Social Science Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR

Credits: 15

Eighth Term

- ECE Elective - 3 credits
- Technical Elective - 3 credits
- Technical Elective - 3 credits
- Open Elective - 3 credits
- ECE 1885 - DEPARTMENTAL SEMINAR
- ECE 1896 - SENIOR DESIGN PROJECT *

Credits: 15

Note:

*Students may take ENGR 1050 - PRODUCT REALIZATION to fulfill the Senior Design Project requirement with approval from the Undergraduate Coordinator.

Electives

ECE Electives

Students must complete at least four ECE Elective courses from the following list:

- ECE 1110 - COMPUTER ORGANIZATION AND ARCHITECTURE
- ECE 1120 - HARDWARE DESIGN METHODOLOGIES 1
- ECE 1140 - SYSTEMS AND PROJECT ENGINEERING
- ECE 1150 - COMPUTER NETWORKS
- ECE 1155 - INFORMATION SECURITY
- ECE 1160 - INTRODUCTION TO EMBDDED SYSTEM DESIGN
- ECE 1161 - EMBEDDED COMPUTER SYSTEM DESIGN 2
- ECE 1165 - DEPENDABLE COMPUTER ARCHITURE
- ECE 1166 - PARALLEL COMPUTER ARCHITECTURE
- ECE 1170 - SPECIAL TOPICS: COMPUTER
- ECE 1180 - COMPUTATIONAL MODELING AND SIMULATION FOR ENGINEERS
- ECE 1188 - CYBER-PHYSICAL SYSTEMS
- ECE 1192 - INTRODUCTION TO VLSI DESIGN
- ECE 1193 - ADVANCED VLSI DESIGN
- ECE 1195 - ADVANCED DIGITAL DESIGN
- ECE 1215 - ELECTROACOUSTICS AND AUDIOELECTRONICS
- ECE 1232 - INTRO LASERS & OPTCL ELECTNC
- ECE 1238 - DIGITAL ELECTRONICS
- ECE 1250 - NANOTECHNOLOGY & NANO-ENGINEERING
- ECE 1251 - MICRO AND NANO DEVICE FABRICATION LABORATORY
- ECE 1266 - APPLICTIONS OF FIELDS & WAVES
- ECE 1270 - SPECIAL TOPICS: FUNDAMENTALS ELECTRONICS PROTOTYPING
- ECE 1286 - ANAL & DSGN ANLG INTGRTD CRCT
- ECE 1390 - INTRO TO IMAGE PROCESSING

- ECE 1395 - INTRODUCTION TO MACHINE LEARNING
- ECE 1472 - ANALOG COMMUNICATION SYSTEMS
- ECE 1473 - DIGITAL COMMUNICATION SYSTEMS
- ECE 1562 - DIGITAL AND ANALOG FILTERS
- ECE 1570 - SPECIAL TOPICS
- ECE 1710 - POWER DISTRIBUTION SYSTEMS ENGINEERING AND SMART GRIDS
- ECE 1750 - POWER ELECTRONICS CONVERSION THEORY
- ECE 1769 - POWER SYSTEM ANALYSIS 1
- ECE 1770 - SPECIAL TOPICS: ELECTRONIC MICROPROCESSOR SYSTEMS
- ECE 1771 - ELECTRIC MACHINERY
- ECE 1773 - POWER GENERATION, OPERATION, AND CONTROL
- ECE 1775 - POWER QUALITY
- all 2000/3000 level ECE graduate courses

Communication Skills Electives

Students must complete at least one Communication Skills Elective course from the following list:

- COMMRC 0500 - ARGUMENT
- COMMRC 0510 - DEBATE
- COMMRC 0520 - PUBLIC SPEAKING
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- COMMRC 0540 - DISCUSSION
- COMMRC 0550 - SPEECH COMPOSITION
- COMMRC 1102 - ORGANIZATIONAL COMMUNICATION
- COMMRC 1106 - SMALL GROUP COMMUNICATION
- COMMRC 1109 - NONVERBAL COMMUNICATION
- COMMRC 1170 - CROSS CULTURAL COMMUNICATION
- COMMRC 1520 - ADVANCED PUBLIC SPEAKING
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- ENGCMP 0401 - WRITTEN PROFESSIONAL COMMUNICATION: TOPICS IN DIVERSITY
- ENGCMP 0420 - WRITING FOR THE PUBLIC
- ENGCMP 0440 - CRITICAL WRITING
- ENGCMP 0450 - RESEARCH WRITING
- ENGCMP 0510 - NARRATIVES OF THE WORKPLACE
- ENGCMP 0520 - INTEGRATING WRITING AND DESIGN
- ENGCMP 0521 - WRITING WITH DATA
- ENGCMP 0530 - WRITING FOR THE SCIENCES
- ENGCMP 0560 - WRITING ARGUMENTS
- ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING
- ENGCMP 0610 - COMPOSING DIGITAL MEDIA
- ENGCMP 0641 - WRITING FOR CHANGE
- ENGCMP 1099 - THE LANGUAGE OF POLICY AND POWER: TOPICS IN DIVERSITY
- ENGCMP 1100 - LANGUAGE OF BUSINESS AND INDUSTRY
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1104 - CORPORATE STORYTELLING
- ENGCMP 1111 - PROFESSIONAL WRITING IN GLOBAL CONTEXTS
- ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA
- ENGCMP 1250 - ADVANCED TOPICS PUBLIC/PROFESSIONAL WRITING
- ENGCMP 1400 - GRANT WRITING
- ENGCMP 1401 - WRITING FOR FUNDRAISING AND DEVELOPMENT
- ENGCMP 1420 - WRITING PROPOSALS FOR BUSINESS
- ENGCMP 1510 - WRITING WITH STYLE
- ENGR 1010 - COMMUNICTN SKILLS FOR ENGINEERS

Humanities/Social Science Electives

Students must complete at least four Humanities/Social Science Elective courses from a list of Approved Electives as part of the Computer Engineering curriculum. (Note: students will complete a total of six Humanities/Social Science Elective courses, but two are completed as part of the First-Year Program curriculum, and four are completed as part of the Computer Engineering curriculum.)

Open Electives

Students must complete at least one Open Elective course. Any course that is not of a similar nature to, or lower level than, a required or previously taken course can be used to fulfill this requirement. Three credits of Physical Education, or three credits of Band, ROTC, or Chorus may also be used as an Open Elective. Three credits of Co-op may also be used to fulfill the Open Elective.

Technical Electives

Students must complete at least three Technical Elective courses from the ECE Department's list of approved Technical Electives. Technical Electives can be any ECE elective or any other School of Engineering course, which has not been used to fulfill another requirement or does not substantially duplicate other required course material. Most science and math courses that can be taken by students majoring in those departments can be used as Technical Electives.

Minor

Electrical Engineering Minor

The Department of Electrical and Computer Engineering offers an electrical engineering (EE) minor for engineering students who are not majoring in electrical or computer engineering. The minor will be of interest to undergraduate engineering students who wish to develop expertise in areas such as electronics, instrumentation, control, signal processing, or digital devices. Requirements for engineering physics are slightly different than those for other students because of the extensive overlap between the two programs.

All students interested in declaring a minor in electrical engineering should do so on their application for graduation.

Note:

Beginning in Fall 2019, students who wish to pursue a minor in Electrical Engineering should contact the Program Coordinator for additional information.

Required Courses

Required Courses:

- ECE 0031 - LINEAR CIRCUITS AND SYSTEMS 1 or
- ECE 0101 - LINEAR CIRCUITS AND SYSTEMS

- ECE 0132 - DIGITAL LOGIC or
- ECE 0201 - DIGITAL CIRCUITS AND SYSTEMS

- ECE 0257 - ANALYSIS AND DESIGN OF ELECTRONIC CIRCUITS or
- ECE 0102 - MICROELECTRONIC CIRCUITS

- Three additional elective electrical engineering courses

Electives

Students can select the three electives from any courses offered in electrical engineering. Students must obtain a QPA average of at least 2.0 in the courses required for the minor, with a passing grade (D- or higher) in all courses. Since most EE courses have specific prerequisites, students should be sure that they have the required courses for the electives they wish to take.

The suggestions below are appropriate for students with interests in a particular area, and they meet prerequisite requirements:

Electronics

- ECE 1247 - SEMICONDUCTOR DEVICE THEORY
- ECE 1238 - DIGITAL ELECTRONICS
- ECE 1286 - ANAL & DSGN ANLG INTGRTD CRCT

Instrumentation

The following two courses, plus another ECE course:

- ECE 1201 - ELECTNC MEASURMNTS & CRCTS LAB (only if taking ECE 0257 instead of ECE 0102)
- ECE 1247 - SEMICONDUCTOR DEVICE THEORY

Digital Systems

- ECE 0142 - COMPUTER ORGANIZATION or
- ECE 0202 - EMBEDDED PROCESSORS AND INTERFACING

- ECE 1160 - INTRODUCTION TO EMBDDED SYSTEM DESIGN

- ECE 1192 - INTRODUCTION TO VLSI DESIGN

Signals and Systems

- ECE 1552 - SIGNALS AND SYSTEMS ANALYSIS or
- ECE 0402 - SIGNALS, SYSTEMS, & PROBABILITY

- ECE 1562 - DIGITAL AND ANALOG FILTERS

- ECE 1673 - LINEAR CONTROL SYSTEMS

Power

- ECE 1769 - POWER SYSTEM ANALYSIS 1 or
- ECE 1701 - FUNDAMENTALS OF ELECTRIC POWER ENGINEERING

- ECE 1771 - ELECTRIC MACHINERY

Special Notes for Engineering Physics students

The requirements for the electrical engineering minor for students in the Engineering Physics Program include (in addition to the EE courses that are already part of their degree requirements):

- ECE 0132 / COE 0132 or ECE 0201
- ECE 0142 or ECE 0202

Since engineering physics students take ECE 0031 or ECE 0101 and several other ECE courses as part of their degree requirements, they need only complete the two extra courses listed above to obtain the EE minor.

Department of Industrial Engineering

Industrial Engineering (IE) is all about choices. It is the engineering discipline that offers the most wide-ranging array of opportunities in terms of employment, and it is distinguished by its flexibility. While other engineering disciplines tend to apply skills to specific areas, industrial engineers may be found working everywhere from traditional manufacturing companies to airlines, distribution companies to financial institutions, hospitals to consulting companies, high-tech corporations to luxury retailers. Engineers are educated to design and build things, but IEs are educated to design and improve the productivity and quality of integrated systems of people, material, computers, information, equipment, and other resources. IEs draw

upon the specialized knowledge and skills in the mathematical, physical and social sciences together with the principles, methods and modeling tools of engineering analysis to make improvements in business processes. In addition to making significant contributions to corporate profitability, they also make the workplace a more productive and streamlined environment. The Department of Industrial Engineering meets the challenge of the growing complexity of modern industry through an intensive educational program that includes a required international component. Building upon a solid foundation in the basic sciences, engineering, and computers, the curriculum provides the student with a capability for systems analysis and design that crosses traditional disciplinary lines and an awareness of and concern for the demands of today's dynamic social systems. The industrial engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Major

Industrial Engineering

The areas of concentration available for Industrial Engineering students are as follows:

- Engineering Management
- Health Systems Engineering
- Operations Research & Computer Modeling
- Product Development & Manufacturing Systems

Information on all four areas of concentration can be found here.

Undergraduate Curriculum

The objectives of our undergraduate program are for our graduates to be:

- Successful professionals, who adapt to and drive changes in technology and our global society in their desired career path, including industrial engineering based careers, as well as other professional disciplines;
- Lifelong learners and pursuers of advanced knowledge;
- Leaders who serve their profession and/or community.

The IE faculty has committed itself to the broad, multidisciplinary approach needed to solve problems in today's organizations. In addition to core courses in industrial engineering, you will be exposed to the humanities and social sciences with a global focus and have the opportunity to select five technical electives. These technical electives may be chosen from specialized and advanced offerings of the industrial engineering department. In consultation with your advisor, these electives may also be selected from other programs in the University such as other engineering departments, the sciences, mathematics, economics, business, computer science, or information science.

Recognizing that engineering is an increasingly global profession, the undergraduate program is also committed to providing its graduates with the skills they need to compete on an international basis. Such skills will enable Pitt IE graduates to not only have a distinct employment advantage, but will also provide them with a cross-cultural awareness that will enhance their leadership abilities. This commitment is emphasized through an international requirement for all of our undergraduates for which students are expected to complete an international experience, or, in some cases select an integrated set of humanities and social sciences courses with a global focus. The final term of our undergraduate program includes a capstone senior design course in which you, working in small teams with other students, will complete a semester long project in a corporate setting. These projects are sponsored by local industry through our Sponsor An Industrial Engineering Team (SAINT) program, jointly supervised by an individual from the company and an IE faculty member.

For more information on the industrial engineering program contact ugradie@pitt.edu or www.engineering.pitt.edu/industrial

Third Term

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- IE 1040 - ENGINEERING ECONOMIC ANALYSIS
- IE 1054 - PRODUCTIVITY ANALYSIS
- IE 1070 - PROBABILITY, RANDOM VARIABLES, AND DISTRIBUTIONS
- ENGR Elective
- IE 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Fourth Term

- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- IE 0015 - INTRODUCTION TO INFORMATION SYSTEMS ENGINEERNG
- IE 1052 - MFG PROCESSES AND ANALYSIS
- IE 1071 - STATISTICAL TESTING AND REGRESSION
- Humanities or Social Science Elective 3
- IE 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Fifth Term

- MATH 0290 - DIFFERENTIAL EQUATIONS or
- MATH 0413 - INTRO THEORETICAL MATHEMATICS
- IE 1051 - ENGINEERING PRODUCT DESIGN
- IE 1061 - HUMAN FACTORS ENGINEERING
- IE 1072 - DESIGN OF EXPERIMENTS & QUALITY ASSURANCE
- IE 1081 - OPERATIONS RESEARCH
- IE 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Sixth Term

- IE 1035 - ENGINEERING MANAGEMENT
- IE 1055 - FACILITY LAYOUT AND MATERIAL HANDLING
- IE 1082 - PROBLSTC METH IN OPERATNS RES
- IE 1083 - SIMULATION MODELING
- ENGR Elective
- IE 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Seventh Term

- IE 1080 - SUPPLY CHAIN ANALYSIS
- Technical Elective 1
- Technical Elective 2
- Technical Elective 3
- Humanities/Social Science Elective 4
- IE 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Eighth Term

- IE 1090 - SENIOR PROJECTS
- Humanities/Social Science Elective 5
- Humanities/Social Science Elective 6
- Technical Elective 4
- Technical Elective 5
- IE 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Minor

Industrial Engineering Minor

All other engineering majors can earn a Minor in Industrial Engineering by completing three required courses and two elective courses.

Required Courses

- ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1
- IE 1054 - PRODUCTIVITY ANALYSIS
- IE 1081 - OPERATIONS RESEARCH

Elective Courses

Choose any 3 of the following courses.

- IE 1035 - ENGINEERING MANAGEMENT
- IE 1040 - ENGINEERING ECONOMIC ANALYSIS
- IE 1051 - ENGINEERING PRODUCT DESIGN
- IE 1052 - MFG PROCESSES AND ANALYSIS
- IE 1055 - FACILITY LAYOUT AND MATERIAL HANDLING
- IE 1061 - HUMAN FACTORS ENGINEERING
- IE 1080 - SUPPLY CHAIN ANALYSIS
- IE 1082 - PROBLSTC METH IN OPERATNS RES
- IE 1083 - SIMULATION MODELING

Additional Information

The student must earn a GPA of at least 2.0 in the five courses used to complete the requirements for the minor.

Certificate

Health Systems Engineering Certificate

The HSE Certificate provides engineering students with the opportunity to apply industrial engineering principles and tools to improve healthcare systems. The Health Systems Engineering program has been designed to let students better understand the dynamics, structure and functions of Healthcare Organizations.

To complete the certificate students must satisfy the following requirements:

- Complete six (6) credits of the required Health Systems Engineering courses- listed below as IE 1106 and IE 1108.
- Complete nine (9) additional approved credits from electives in the healthcare field.These can be from IE, CBA or the Health Related Professions. Approved courses are listed below.With approval of the undergraduate coordinator, other elective courses can be chosen from areas relevant to the student's objectives such as Health Related Professions or Information Sciences.
- Complete their Senior Design Project course in a healthcare related organization.
- Acquire approved work experience with a healthcare organization through internships or the Co-op program.Three of the 9 elective credits can be earned by completing the co-op program within a healthcare organization.

HSE Required Courses

- IE 1106 - OPERATIONS IMPROVEMENT IN HEALTHCARE
- IE 1108 - HEALTH SYSTEMS ENGINEERING: QUANTITATIVE ANALYTICS
- Senior Projects - Focused on Healthcare

Approved Elective Courses for HSE

- IE 1014 - DATA BASE DESIGN
- IE 1102 - LEAN SIX SIGMA I (GREEN BELT)
- IE 1103 - LEAN SIX SIGMA II (BLACK BELT)
- IE 1122 - FUNDAMENTALS OF SYSTEMS ENGINEERING
- IE 1123 - PROJECT MANAGEMENT FOR ENGINEERS
- IE 1185 - STOCHASTIC MODELING AND DATA ANALYTICS IN HEALTHCARE OPERATIONS MANAGEMENT

Supply Chain Management Certificate

The Certificate in Supply Chain Management (CSCM) provides undergraduate engineering students with the opportunity to understand important concepts in supply chain management and develop technical and managerial skills which are highly valued in today's corporate environment. The program also offers an international travel experience for students to gain hands-on exposure to global supply chain organizations.

Supply chain management encompasses not only the design and planning of supply chain activities, but also the execution, control and monitoring that help companies build a competitive infrastructure and create net value. The supply chain covers all areas, not just manufacturing and services, but also includes suppliers, retailers, warehouses, logistics and customer service; all functional areas involved in receiving and filling a customer's order with a repeatable and satisfying experience. This certificate requires 15 credits to complete.

Enrollment is open to students in all of the undergraduate engineering programs in the Swanson School of Engineering. The requirements for this certificate can be found on the undergraduate pages at https://www.engineering.pitt.edu/industrial.

Department of Mechanical Engineering and Materials Science and Engineering

Materials Science and Engineering

Materials limitations often impede technological and social progress. The materials engineer applies special knowledge of the structure, behavior, and properties of materials to solve these engineering problems. The engineer may be concerned with developing and improving processes for producing metals and alloys or ceramics; developing new alloys or improving existing alloys; and/or achieving better use of alloys and other materials. New materials must be designed for a variety of functions, including structural, aesthetic, electrical, or magnetic and operating environments. Materials may come in forms so minute that the work is done under a microscope or in forms so large that special handling cranes are required.

Research efforts in the department involve work on the development of new high-strength steels, corrosion and oxidation, structural and electronic ceramics, smart materials, high-temperature materials, plastic deformation, phase transformations, and strengthening mechanisms. A number of graduate students are engaged in thesis research on these topics, and undergraduates are encouraged to work on related senior projects. The materials science and engineering program is accredited by the Engineering Accreditation Commission of ABET, http:// www.abet.org. For more information on the program, contact undrmems@engr.pitt.edu or see http://www.engineering.pitt.edu/Departments/MEMS/.

Mechanical Engineering

Mechanical engineering is concerned with both energy use and the design of machines and systems in such sectors as transportation, manufacturing, materials handling, power generation, and environmental control. Mechanical engineers are involved in design, development, research, management, and related activities in these fields. The breadth and diversity of the profession requires an undergraduate curriculum that provides a sound foundation in the basic sciences, computational skills including use of computers, and the fundamentals of engineering and engineering design. This curriculum provides a base for future professional growth and is also an excellent background for those who wish to pursue careers in other professions including management, law, or medicine. The mechanical engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. For more information on the program, contact undrmems@engr.pitt.edu or see http://www.engineering.pitt.edu/Departments/MEMS/.

Engineering Science

Engineering Science combines a study of an engineering disciple with the study of a basic science. This provides the educational background for the study of multi-disciplinary problems. Engineering Science is divided into four curricula: Engineering Physics, Nano-Physics/Materials Science,

Nano-Chemistry/Bioengineering and Engineering Mechanics. These areas allow the study of problems in development of electronic and biologic materials, electronic and optical devices, and fluid and solid mechanics. Engineering science graduates are involved in design, development, research, management, and related activities in these fields. The breadth and diversity of the profession requires an undergraduate curriculum that provides a sound foundation in the basic sciences, computational skills, and the fundamentals of engineering and engineering design. This curriculum provides a base for future professional growth and is also an excellent background for those who wish to pursue careers in other professions including management, law, or medicine. The Engineering Science program is accredited by the Engineering Accreditation Commission of ABET, http:// www.abet.org. For more information on the program, contact undrmems@engr.pitt.edu or see http://www.engineering.pitt.edu/Departments/MEMS/.

Major

Engineering Science

The following areas of concentration are available for Engineering Science students:

The Engineering Science Program is designed for students who have a strong interest in science and mathematics as well as a desire to acquire the skills and perspective of engineering. The Engineering Science Program offers flexible curricula in several interdisciplinary areas of concentration. The program is built on sequences of courses from multiple science and engineering programs. All areas of concentration combine in-depth exposure to both science and engineering. All areas of concentration combine in-depth exposure to both science and engineering and include the opportunity for both a team capstone, as well as an individual project experience. The overall goal of the program is to develop each student's ability to think analytically across disciplines and develop a knowledge base well suited to tackle future technical challenges that will require a thorough understanding of a discipline in the physical sciences and/or mathematics combined with engineering. Interested students are encouraged to pursue the Engineering Science degree jointly with the University Honors College (UHC) by completing the requirements for Engineering Science and satisfying the special degree requirements of the UHC. The Engineering Science program is ideal preparation for graduate school in a wide range of disciplines, for rewarding careers in industry, and is an excellent background for those who wish to pursue careers in other professions, such as management, law, education, or medicine.

NOTE: The Engineering Physics curriculum (which had been available as a separate Engineering Physics Program until 2010) is now an area of concentration within Engineering Science.

The program objectives for Engineering Science are to produce engineers who build successful, diverse careers based on:

- an understanding of the physical/life sciences, engineering analysis and design, and interdisciplinary problem solving;
- a commitment to ongoing professional development as exemplified by, for example, graduate study, training, conference participation, and certification;
- advancement and leadership in professional and/or community life.

For more information on the program, contact undrmems@pitt.edu or see http://www.engineering.pitt.edu/Departments/MEMS/_Content/Undergraduate/Engineering-Science/Engineering-Science-Page-Overview.

Engineering Science Undergraduate Curriculum

The Engineering Science Program currently offers the following areas of concentration:

- *Engineering Physics Concentration*
- *Nanotechnology Concentration Physics/Materials Emphasis or Nanotechnology Concentration Chemistry/Bioengineering Emphasis and*
- *Engineering Mechanics Concentration*

Materials Science and Engineering

The following areas of concentration are available for Materials Science and Engineering students:

Materials Science and Engineering Undergraduate Curriculum

The undergraduate program is designed to give the student a basic understanding of the structure and properties of materials, the principles underlying the processing of materials, and the concepts of engineering design and problem solving. Both theory and practice are emphasized. Laboratory experiences are integrated into the curriculum, and a variety of professional and engineering science electives are available. When desirable, specialized programs can be arranged for the students with well-defined interests and goals. Students are prepared to accept positions in production, research, and management, in both the basic materials and advanced or high-tech materials industries. This versatile education is a strong preparation for graduate work in metallurgy and materials and other related fields.

The major objectives of the materials science and engineering program are to

- Demonstrate successful application of materials science and engineering knowledge and skills for industry, public sector organizations, or their profession.
- Pursue life-long learning through advanced professional degrees, graduate studies in materials science or another engineering discipline, professional training or engineering certification.
- Demonstrate professional and intellectual growth as leaders in their profession and/or community.

Third Term

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- ENGR 0022 - MATERIALS STRUCTURE AND PROPERTIES
- ENGR 0135 - STATICS & MECHC OF MATERIALS 1
- MEMS 0024 - INTRODUCTION TO MECHANICAL ENGINEERING DESIGN
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Fourth Term

- MATH 0290 - DIFFERENTIAL EQUATIONS
- ENGR 0145 - STATICS & MECHC OF MATERIALS 2
- MEMS 0031 - ELECTRICAL CIRCUITS
- MEMS 0040 - MATERIALS AND MANUFACTURING
- MEMS 0051 - INTRODUCTION TO THERMODYNAMICS
- Communication Skills Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 18

Fifth Term

- MEMS 1010 - EXPERIMENTAL METHODS IN MATERIALS SCIENCE AND ENGINEERING
- MEMS 1052 - HEAT AND MASS TRANSFER
- MEMS 1053 - STRUCTURE OF CRYSTALS AND DIFFRACTION
- MEMS 1058 - ELECTROMAGNETIC PROPERTIES OF MATERIALS
- MEMS 1059 - PHASE EQUILIBRIA IN MULTI-COMPONENT MATERIALS
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Sixth Term

- MEMS 1011 - STRUCTURE AND PROPERTIES LAB
- MEMS 1028 - MECHANICAL DESIGN I
- MEMS 1063 - PHASE TRANSFORMATION AND MICROSTRUCTURE EVOLUTION
- MEMS 1070 - MECHANICAL BEHAVIOR OF MATERIALS
- MSE Technical Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 14

Seventh Term

- ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1
- MEMS 1030 - MATERIAL SELECTION
- MEMS 1079 - SENIOR MATERIALS RESEARCH PROJECT
- MSE Technical Elective - 3 Credits
- Humanity/Social Science Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Eighth Term

- MEMS 1043 - SENIOR DESIGN PROJECT
- MSE Technical Elective - 3 Credits
- Humanity/Social Science Elective - 3 Credits
- Humanity/Social Science Elective - 3 Credits
- Humanity/Social Science Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Mechanical Engineering

The following areas of concentration are available for Mechanical Engineering students:

Ferrous Physical Metallurgy Concentration

Mechanical Engineering Undergraduate Curriculum

In the first two years, the mechanical engineering curriculum concentrates on the fundamentals of sciences, mathematics, and engineering. The last two years provide increased depth in the engineering sciences, including fluid mechanics, heat transfer, and systems analysis and also provide exposure to engineering applications, such as mechanical measurements, manufacturing, mechanical design, and thermal systems. Sufficient technical electives are allowed to permit each student to explore areas of special interest.

Course work in the social sciences and humanities is included for the enhancement of the student's awareness of the importance of social, political, and economic problems in the practice of engineering. Where appropriate, the upper-level courses introduce consideration of human values, social benefits, and constraints to prepare future practicing engineers to be responsive to such concerns.

The major objectives of the program are to:

- Demonstrate successful application of mechanical engineering knowledge and skills for industry, public sector organizations or their profession.
- Pursue life-long learning through advanced professional degrees, graduate studies in engineering, professional training or engineering certification.
- Demonstrate professional and intellectual growth as leaders in their profession and/or community.

Third Term

- MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3
- MATH 0280 - INTRO TO MATRICES & LINEAR ALG
- ENGR 0022 - MATERIALS STRUCTURE AND PROPERTIES
- ENGR 0135 - STATICS & MECHC OF MATERIALS 1
- MEMS 0024 - INTRODUCTION TO MECHANICAL ENGINEERING DESIGN
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 16

Fourth Term

- MATH 0290 - DIFFERENTIAL EQUATIONS
- ENGR 0145 - STATICS & MECHC OF MATERIALS 2
- MEMS 0031 - ELECTRICAL CIRCUITS
- MEMS 0051 - INTRODUCTION TO THERMODYNAMICS
- Communication Skills Elective - 3 Credits
- MEMS 1015 - RIGID-BODY DYNAMICS
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 18

Fifth Term

- MEMS 0071 - INTRODUCTION TO FLUID MECHANICS
- MEMS 1014 - DYNAMIC SYSTEMS
- MEMS 1028 - MECHANICAL DESIGN I
- Engineering Elective - 3 Credits
- Humanity/Social Science Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Sixth Term

- MEMS 0040 - MATERIALS AND MANUFACTURING
- MEMS 1029 - MECHANICAL DESIGN II
- MEMS 1041 - MECHANICAL MEASUREMENTS 1
- MEMS 1051 - APPLIED THERMODYNAMICS
- Humanity/Social Science Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Seventh Term

- MEMS 1042 - MECHANICAL MEASUREMENTS 2
- MEMS 1052 - HEAT AND MASS TRANSFER
- ME Technical Elective - 3 Credits
- Dynamic Systems Elective - 3 Credits
- Humanity/Social Science Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Eighth Term

- MEMS 1043 - SENIOR DESIGN PROJECT
- MEMS 1071 - APPLIED FLUID MECHANICS
- ME Technical Elective - 3 Credits
- ME Technical Elective - 3 Credits
- Humanity/Social Science Elective - 3 Credits
- MEMS 1085 - DEPARTMENTAL SEMINAR

Credits: 15

Minor

Materials Science and Engineering Minor

Requirements

Undergraduate engineering students may earn a Minor in Materials Science Engineering by completing five courses.

- ENGR 0022 - MATERIALS STRUCTURE AND PROPERTIES
- MEMS 0040 - MATERIALS AND MANUFACTURING
- MEMS 1053 - STRUCTURE OF CRYSTALS AND DIFFRACTION
- MEMS 1059 - PHASE EQUILIBRIA IN MULTI-COMPONENT MATERIALS
- MEMS 1063 - PHASE TRANSFORMATION AND MICROSTRUCTURE EVOLUTION

Mechanical Engineering Minor

Undergraduate engineering students can earn a Minor in Mechanical Engineering by completing two required courses and three elective courses in one of four focused option areas.

Required Courses

- MEMS 0024 - INTRODUCTION TO MECHANICAL ENGINEERING DESIGN
- MEMS 1028 - MECHANICAL DESIGN I

Focus Options/Elective Courses

Thermal-Fluids Option

- MEMS 0051 - INTRODUCTION TO THERMODYNAMICS
- MEMS 0071 - INTRODUCTION TO FLUID MECHANICS
  and either
- MEMS 1051 - APPLIED THERMODYNAMICS or

- MEMS 1071 - APPLIED FLUID MECHANICS

Dynamic Systems Option

- MEMS 1014 - DYNAMIC SYSTEMS
- MEMS 1015 - RIGID-BODY DYNAMICS
- MEMS 1045 - AUTOMATIC CONTROLS

Mechanical Design Option

- MEMS 1029 - MECHANICAL DESIGN II
- MEMS 1033 - FRACTURE MECHANICS FOR PRODUCT DESIGN AND MANUFACTURING
- MEMS 1047 - FINITE ELEMENT ANALYSIS

Mechanical Measurements Options

- MEMS 1014 - DYNAMIC SYSTEMS
- MEMS 1041 - MECHANICAL MEASUREMENTS 1
- MEMS 1042 - MECHANICAL MEASUREMENTS 2

Additional Information

Depending upon concentration, Bioengineering students have several different possibilities to earn a Mechanical Engineering minor.

- Bioimaging & Signals concentration students : none of the courses in any option can be used as a concentration elective. Two courses can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement. Two, and possibly three, courses are extra and on your own.
- Biomechanics concentration students : MEMS 0024 and MEMS 1028 are concentration electives.
- *Thermal-Fluids Option*

BIOENG 1210 is a required course for BioE majors. MEMS 1071 is a concentration elective. MEMS 1071 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement.

- *Dynamics Systems Option*

BIOENG 1255 is a required course for BioE majors. MEMS 1015 is a concentration elective. MEMS 1045 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement.

- *Mechanical Design Option*

BIOENG 1161 is a required course for BioE majors. MEMS 1033 and MEMS 1047 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement.

- *Mechanical Measurements Option*

BIOENG 1255 is a required course for majors. MEMS 1041 and MEMS 1042 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement.

- CE concentration students : all options can use two of the courses to satisfy the Bioengineering 2- course, 6-credit advanced engineering/science elective requirement. At least one other course is extra and on your own.
- MPE concentration students : MEMS 0024 and MEMS 1028 are concentration electives.
- *Thermal-Fluids Option*

BIOENG 1210 is a required course for BioE majors. MEMS 1071 is a concentration elective. MEMS 0071 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science requirement.

- *Dynamics Systems Option*

BIOENG 1255 is a required course for BioE majors. MEMS 1015 and MEMS 1045 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement.

- *Mechanical Design Option*

BIOENG 1161 is a required course for BioE majors. MEMS 1033 and MEMS 1047 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement.

- *Mechanical Measurements Option*

BIOENG 1255 is a required course for majors. MEMS 1041 and MEMS 1042 can be used to satisfy the Bioengineering 2-course, 6-credit advanced engineering/science elective requirement.

Certificate

Engineering Simulation in Design Certificate

Computational simulation has become an indispensable engineering tool across a broad spectrum of industries and fields of study. Simulation-based approaches provide engineers with the opportunity to extend the boundaries of traditional engineering design processes. However, understanding the role of simulation within the context of an engineering system or process is essential to the successful application of these tools.

The certificate program in Engineering Simulation in Design fosters a simulation-based problem solving approach and encourages students to identify opportunities to enhance engineering analysis and design through simulation. The program adopts a mindset that is a synthesis of computational and traditional approaches. Students will leverage practical simulation skills to explore and study interdisciplinary concepts.

The certificate is designed for undergraduate students and requires 15 credits to complete made up of the following areas:

Core Skills (6 credits)

Students will choose at least two:

- MEMS 1028 - MECHANICAL DESIGN I
- MEMS 1052 - HEAT AND MASS TRANSFER
- MEMS 1047 - FINITE ELEMENT ANALYSIS
- MEMS 1071 - APPLIED FLUID MECHANICS
- MEMS 1014 - DYNAMIC SYSTEMS

Simulation Skills (3 credits)

Students are required to take:

- MEMS 1120 - APPLIED ENGINEERING SIMULATION IN DESIGN

Integrated Skills (3 credits)

Students will choose at least one:

- MEMS 1065 - THERMAL SYSTEMS DESIGN
- MEMS 1043 - SENIOR DESIGN PROJECT
- ENGR 1050 - PRODUCT REALIZATION

  Each of the above courses is project based and offers the potential for student exposure to analysis and design of an integrated system. Students enrolled in the Engineering Simulation in Design certificate program must include a simulation component to their adopted project. The program coordinator will evaluate and approve projects.

Practical Skills (3 credit total)

Certificate candidates must enroll in the simulation workshop for three terms. The 1-credit workshop will be offered every term and will meet once per week. The workshop will provide a support forum for students engaged in simulation problems across the certificate program courses.

- MEMS 1121 - APPLIED ENGINEERING SIMULATION IN DESIGN (workshop)

Additional Information

For additional information about the certificate, please contact the following:

David Schmidt

412-624-9755

509 Benedum Hall

david.schmidt@pitt.edu

Nuclear Engineering Certificate

The undergraduate certificate in Nuclear Engineering is a five-course sequence, consisting of three nuclear engineering courses and two discipline-specific courses related to nuclear engineering from the various engineering departments. Any undergraduate engineering students in the Swanson School of Engineering can earn the certificate in conjunction with an undergraduate engineering degree. Qualified students in the Dietrich School of Arts and Sciences can pursue the certificate with approval from the Nuclear Engineering program director.

After earning the certificate, students should be able to do the following: apply the concepts of nuclear and reactor physics, reactor kinetics, radiation protection, fuel depletion, and heat transfer to engineering problems; apply engineering skills, knowledge, and expertise to nuclear energy problems; for light water reactors, support engineering projects for the design of the reactor core and the reactor coolant system; assess important social and technical issues related to nuclear science and technology; describe and explain the nuclear fuel cycle from mining to disposal including reprocessing and waste management.

Interested students should visit http://www.engineering.pitt.edu/nuclear/ or contact either the Director or Associate Director of the Nuclear Engineering program; currently, these posts are occupied by Dr. Heng Ban (heng.ban@pitt.edu) and Dr. Tom Congedo (tvc9@pitt.edu), respectively.

Requirements

Fifteen (15) credits are required to complete the certificate. A minimum 2.5 GPA is required for students to participate in the certificate. Students must obtain a GPA of at least 2.5 for the courses taken. All undergraduate certificate students are required to complete three (3) courses from the list below as well as two (2) department specific courses:

- ENGR 1700 - INTRODUCTION TO NUCLEAR ENGINEERING
- ENGR 1701 - FUNDAMENTALS OF NUCLEAR REACTORS
- ENGR 1702 - NUCLEAR PLANT TECHNOLOGY

Plus two (2) Degree Specific Courses

Students should select two (2) courses from the list below that are appropriate to their degree of study.

Bioengineering

- IE 1061 - HUMAN FACTORS ENGINEERING
- BIOENG 1810 - BIOMATERIALS AND BIOCOMPATIBILITY

Chemical Engineering

- CHE 0200 - CHEMICAL ENGINEERING THERMODYNAMICS
- CHE 0300 - TRANSPORT PHENOMENA
- CHE 0400 - REACTIVE PROCESS ENGINEERING
- CHE 0500 - SYSTEMS ENGINEERING 1: DYNAMICS AND MODELING

Civil Engineering

- CEE 1340 - CONCRETE STRUCTURES 1
- CEE 1514 - ENVIRONMENTAL IMPACT ASSESSMENT
- CEE 2340 - CONCRETE STRUCTURES 2

- CEE 2343 - PRESTRESSED CONCRETE

Electrical and Computer Engineering

- ECE 1150 - COMPUTER NETWORKS
- ECE 1160 - INTRODUCTION TO EMBDDED SYSTEM DESIGN
- ECE 1673 - LINEAR CONTROL SYSTEMS
- ECE 1769 - POWER SYSTEM ANALYSIS 1

Engineering Science

- MEMS 1047 - FINITE ELEMENT ANALYSIS
- MEMS 1052 - HEAT AND MASS TRANSFER
- MEMS 1063 - PHASE TRANSFORMATION AND MICROSTRUCTURE EVOLUTION
- MEMS 1071 - APPLIED FLUID MECHANICS

Industrial Engineering

- ENGR 1500 - ETHICAL DILEMMAS BALANCING COST, RISK, AND SCHEDULING
- IE 1062 - DATA MINING
- IE 1076 - TOTAL QUALITY MANAGEMENT
- IE 1086 - DECISION MODELS
- IE 1089 - ADDITIVE MANUFACTURING

Mechanical Engineering and Materials Science

- MEMS 1030 - MATERIAL SELECTION
- MEMS 1033 - FRACTURE MECHANICS FOR PRODUCT DESIGN AND MANUFACTURING
- MEMS 1045 - AUTOMATIC CONTROLS
- MEMS 1047 - FINITE ELEMENT ANALYSIS
- MEMS 1052 - HEAT AND MASS TRANSFER
- MEMS 1063 - PHASE TRANSFORMATION AND MICROSTRUCTURE EVOLUTION
- MEMS 1065 - THERMAL SYSTEMS DESIGN
- MEMS 1070 - MECHANICAL BEHAVIOR OF MATERIALS
- MEMS 1071 - APPLIED FLUID MECHANICS

Non-engineering Math and Science Majors

Non-engineering math and science majors (e.g., Math, Chemistry, Physics) must complete the three (3) core Nuclear Engineering courses, provide the Director of the Nuclear Engineering a proposal for two additional courses in the student's major and obtain the Director's signed approval. The ~1-page proposal must include the following:

- two (2) courses from the student's major
- the catalog description of the two (2) courses
- a short statement on how these two (2) courses complement the three (3) core nuclear courses and/or apply to nuclear engineering.

This proposal will be signed by the Director or Associate Director of the Nuclear Engineering program and kept on record by the MEMS Department.

Articulation Agreements

University of Pittsburgh Articulation Agreements

Academic Unit	Articulation Agreements With
College of Business Administration	Community College of Allegheny County
School of Dental Medicine	Community College of Philadelphia
	Cuyahoga Community College
	Harcum College
	Montgomery County Community College
	Westmoreland County Community College
School of Education	Allegheny College
John A. Swanson School of Engineering	Allegheny College
	Arcadia University
	Clarion University
	Duquesne University of the Holy Spirit
	Franciscan University of Steubenville
	Gannon University
	Gettysburg College
	Indiana University of Pennsylvania
	La Roche College
	Lock Haven University
	Saint Francis University
	Saint Vincent College
	Seton Hill University
	Slippery Rock University of Pennsylvania
	Thiel College
College of General Studies	Butler County Community College
	Community College of Allegheny County - Panther Pathways Program
	Community College of Allegheny County
	Community College of Beaver County
	Community College of Philadelphia +
	Cuyahoga Community College +
	Harcum College +
	Montgomery County Community College

	Westmoreland County Community College +
	+(Cross-listed with the School of Dental Medicine)
School of Health and Rehabilitation Sciences	Community College of Allegheny County - DIT
	Community College of Allegheny County - EM
	Community College of Allegheny County - HIM
School of Pharmacy	Shippensburg University
School of Nursing	University of Pittsburgh School of Nursing (ASBN) and Grove City College
School of Information Sciences	National Defense University
	Prince George's Community College
School of Social Work	Butler County Community College
	Community College of Allegheny County
University of Pittsburgh at Bradford (UPB)	Community College of Allegheny County
	Jamestown Community College (New York)
	Neumann University
University of Pittsburgh at Greensburg (UPG)	Westmoreland County Community College
University of Pittsburgh at Johnstown (UPJ)	Pennsylvania Highlands Community College (formerly known as Cambria County Area Community College)

IB Score Information

The following is a list of international baccalaureate tests and scores accepted by the Swanson School of Engineering:

Description	**Score**	**Credits For**	**# Credits**
Biology HL (B grade)	5	BIOSC 0050, 0150	4
Biology HL (A grade)	6, 7	BIOSC 0050, 0150, 0060, 0160	8
Chemistry	5	CHEM 0110	4
Chemistry	6,7	CHEM 0110, 0120	8
Economics HL	6, 7	ECON 0100, 0110	6

English A1 or A	5, 6, 7	ENGLIT 0590	3
Film HL	5, 6, 7	FMST 0120	3
French HL		see dept.	
German HL	5, 6, 7	GER 0000	3
History American HL	5	HIST 0600	3
History American HL	6, 7	HIST 0600, 0601	6
History Europe HL	5	HIST 0100	3
History Europe HL	6, 7	HIST 0100, 0101	6
Math HL	5, 6, 7	MATH 0220	4
Music HL	5, 6, 7	MUSIC 0000	3
Psychology HL	5, 6, 7	PSY 0010	3
Theatre Arts HL	5, 6, 7	THEA 0800	3
Visual Arts HL	5, 6, 7	SA 0000	3

NOTE: Of the six humanities/social science electives that students must take to graduate from the Swanson School of Engineering, only two may be satisfied by AP and/or IB credit.

NOTE: The Swanson School of Engineering only accepts the HL IB scores noted above. No SL scores will be accepted.

Please be aware that IB credits are subject to change at any time and that this list is intended as a guide. IB credit cannot be reviewed and issued until the student is enrolled as a University of Pittsburgh student.

Foundational courses in the First-Year Engineering program are taken in sequence. AP/IB credit may be used for foundational courses (e.g. Math). If a student chooses to repeat a course at Pitt for which he/she has AP/IB credit, then AP/IB credit for subsequent courses in the same sequence is forfeited. Please note that this applies to equivalent courses (e.g. CHEM 0110 and 0120/CHEM 0960 and 0970 are equivalent courses. If a student with AP Chemistry credit chooses to take CHEM 0960 at Pitt , he/she may not then use AP credit for CHEM

0120.) Additionally, if a student with IB credit repeats a class at the University and earns less than the minimum required grade to move forward in the course sequence, he/she may not retroactively use IB credit to earn credit for that course.

AP Score Information

The following is an advanced placement credit guide:

EXAM CODE	DESCRIPTION	SCORE	PITT COURSE CREDITS ISSUED	# PITT CREDITS
ARH	Art History	3, 4, 5	HA&A 0000	3
BY	Biology	4	BIOSC 0050, 0150	4
BY	Biology	5	BIOSC 0050, 0150, 0060, 0160	8
MAB	Calculus AB	4, 5	MATH 0220	4
MBC	Calculus BC	4, 5	MATH 0220, 0230	8
CH	Chemistry	3, 4	CHEM 0110	4
CH	Chemistry	5	CHEM 0110, 0120	8
CHIN	Chinese Language	4, 5	CHIN 0001, 0002	10
GPC	Comparative Government and Politics	4, 5	PS 0300	3
CSA	Computer Science A	4, 5	CS 0401	4
CSAB	Computer Science AB	4, 5	CS 0401	4
EMA	Economics - Macroeconomics	4, 5	ECON 0110	3
EMI	Economics - Microeconomics	4, 5	ECON 0100	3
ENGC	English Language and Composition	4, 5	ENGLIT 0000	3
ELC	English Literature and Composition	4, 5	ENGLIT 0000	3
EH	European History	4, 5	HIST 0100 or HIST 0101	3
FRA	French Language	4	FR 0103	3
FRA	French Language	5	FR 0103, 0104	6
FRI	French Literature	4	FR 0021	3
FRI	French Literature	5	FR 0021, 0055	6
GM	German Language	4	GER 1490	3
GM	German Language	5	GER 1490	5

ITAL	Italian Language	4	ITAL 0113	3
ITAL	Italian Language	5	ITAL 0113, 0115	6
JPN	Japanese Culture and Language	4	JPNSE 1901	3
JPN	Japanese Culture and Language	5	JPNSE 1901	5
LTL	Latin - Literature	4, 5	LATN 0220	3
LTV	Latin - Vergil	4, 5	LATN 0220	3
MSL	Music - Listening and Literature	3, 4, 5	MUSIC 0211	3
MST	Music Theory	3, 4, 5	MUSIC 0100	3
PHCM	Physics C-Mechanics	5	PHYS 0174	4
PY	Psychology	4, 5	PSY 0010	3
SPL	Spanish Language and Culture	4	SPAN 0103	3
SPL	Spanish Language and Culture	5	SPAN 0103, 0104	6
SPLL	Spanish Literature and Culture	4, 5	SPAN 0104, 0120	6
ASG	Studio Art -- 2-D (General Portfolio)	4, 5	SA 0110	3
ASD	Studio Art -- Drawing	4, 5	SA 0130	3
GPU	US Government and Politics	4, 5	PS 0200	3
UH	US History	4, 5	HIST 0600 or HIST 0601	3
WH	World History	4, 5	HIST 0700	3
			UPDATED May 2020	

NOTE: The 4 or 8 credits awarded for BIOSC courses may only count toward a degree in some Engineering majors.

NOTE: The 4 credits awarded for CS courses may only count toward a degree in some Engineering majors.

NOTE: Of the 6 humanities/social science electives students must take to graduate from the Swanson School of Engineering, only two may be satisfied by AP and/or IB credit.

The following AP exams are NOT awarded credit in the Swanson School of Engineering:

AP Statistics
AP Computer Science Priniciples
AP Research
AP Seminar

AP Physics B, Physics 1, Physics 2, Physics C-E&M
AP Human Geography
AP Environmental Science

Please be aware that AP credits are subject to change at any time and that this list is intended as a guide. AP credit cannot be reviewed and issued until the student is enrolled as a University of Pittsburgh student.

Foundational courses in the First-Year Engineering program are taken in sequence. AP/IB credit may be used for foundational courses (e.g. Math). If a student chooses to repeat a course at Pitt for which he/she has AP/IB credit, then AP/IB credit for subsequent courses in the same sequence is forfeited. Please note that this applies to equivalent courses (e.g. CHEM 0110 and 0120/CHEM 0960 and 0970 are equivalent courses. If a student with AP Chemistry credit chooses to take CHEM 0960 at Pitt , he/she may not then use AP credit for CHEM 0120). Additionally, if a student with AP credit repeats a class at the University and earns less than the minimum required grade to move forward in the course sequence, he/she may not retroactively use AP credit to earn credit for that course.

Honors OCC

Build a diverse Honors experience, from scholarly to social

The Honors Outside the Classroom Curriculum (OCC) is a points-based program to help you broaden your experience at Pitt Honors.

Because Honors programs let you guide your own path, think of the OCC as a roadmap to help you shape it. You'll get points not only for your achievements, but also when you try new things, engage with the community, and apply yourself.

It's also incredibly flexible. There are 10 competencies, each with a breadth options to choose from - or you can even suggest your own.

Requirements

Completing the Honors OCC is required for both the Honors joint degree and Honors disctinction.

To complete the Honors OCC, you must:

- Earn **1,200 total points**: at least 100 points in each of the 10 competencies, plus an additional 200 in the category of your choice. (Point values vary.)
- Remain active in the OCC every academic year to stay in good standing for your program.

To stay on track for graduation, you should hit a progress milestone in the app each academic year. The Honors OCC takes about 5-8 semesters to complete, so you should get started as soon as you're admitted to an Honors program. Once you've met the graduation requirements, you can (and should!) still continue to earn points for the leaderboards.

You can browse all the eligible activities, verify your points, and track your progress through the **Pitt OCC Suitable app** (the same app you use for the general Pitt OCC.)

10 competencies

Communication

Sharpen your communication by preparing scholarship application essays, presenting your research at conferences, engaging in interdisciplinary Honors fellowship communities, and more.

Career preparation

Prepare for your future by applying for research programs in your field, engaging in internships, attending networking events, and more.

Art appreciation

Learn to view the world through a more creative lens when you visit museums and Pittsburgh arts events, conduct your own creative research, contribute to Pitt Honors publications, showcase your own creative works, and more.

Global and cultural awareness

Gain a global perspective by pursuing study abroad, attending multicultural events, and more.

Initiative & drive

Take the reins on your academic experience by exploring and striving toward new opportunities.

Leadership

Track your growth as a leader when you take on training, roles, and responsibilities. Gain points for activities like attending seminars, being elected as a student representative, serving as an officer in a campus organization, becoming an Honors RA, and more.

Sense of self

Gain a better awareness of your own personal skills, abilities, values, and beliefs by meeting with Honors mentors and joining programs that foster your self-awareness.

Service to others

Use your talents to impact the world! Volunteer, serve as a mentor, conduct community-based research, join service leadership programs, comple public service internships, and more.

Wellness

Balance your emotional, mental, physical, and financial health with a variety of events and programs, from stress-relief workshops to financial coaching sessions.

Honors pride

Strengthen your committment to the Honors community's values by joining us for social events, supporting our newer students, serving as an Honors ambassador, and more.

You will gain access to the Honors OCC in the Suitable app once you're admitted to either the Honors joint degree or Honors disctinction program.

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School of Health and Rehabilitation Sciences

The School of Health and Rehabilitation Sciences (SHRS) offers educational programs leading to a baccalaureate degree in the following areas:

- Athletic Training
- Communication Science
- Emergency Medicine
- Health Information Management
- Nutrition Science
- Rehabilitation Science

SHRS also offers an accelerated Dietitian Nutritionist Program (BS/MS).

SHRS participates in the University Honors College. Students with high GPAs, and whose studies demonstrate breadth and depth, may apply to complete a research thesis and earn a Bachelor of Philosophy (BPhil) degree in their area of major study.

Through the undergraduate program in Rehabilitation Science, SHRS offers three undergraduate certificate programs in the following areas:

- Assistive Technology in Rehabilitation
- Pathokinesiology in Rehabilitation
- Psycho-Social Issues in Rehabilitation and Personal Care

The School of Health and Rehabilitation Sciences is affiliated with the University of Pittsburgh Schools of the Health Sciences and shares a close affiliation with the world-class University of Pittsburgh Medical Center (UPMC). The medical center comprises a variety of hospitals and clinical facilities that affords students a wealth of opportunities for professional experience.

The SHRS faculty base their teaching upon research studies, clinical service, and participation in their respective professional associations. Faculty research and service typically occurs through multi-disciplinary collaboration in diverse health care and research environments. Consequently, both entry-level and advanced students are exposed to state-of-the-art curricula, which are continually reviewed from the perspective of new research findings, technological developments, changing public policy and accepted clinical and management practice.

Our students are educated and trained to question the basis of current practice, and to challenge prevailing models and assumptions. The entry-level curricula reflect the importance of effective team participation in an inter-disciplinary and rapidly changing environment. Emphasis is given to the student's development of analytical problem solving skills and human relations skills required for effective clinical and supervisory practice. The student is confronted with the transition between a professional commitment to providing high quality care and service, while recognizing the effects of competitive pressures and cost constraints upon the health care organization.

Philosophy of Undergraduate Education

The primary objective of our entry-level professional programs is to educate knowledgeable, skilled, and ethically responsible practitioners, committed to their respective professions and to the high standards of health care and rehabilitation services.

The primary objective of our pre-professional programs is to provide students with an excellent preparation for entry-level professional health care educational programs that are offered at the graduate level, either at the University of Pittsburgh or other universities.

Admission Information

Contact Information

University of Pittsburgh
School of Health and Rehabilitation Sciences
Office of Admissions
4020 Forbes Tower
Pittsburgh, PA 15260
412-383-6558
admissions@shrs.pitt.edu
www.shrs.pitt.edu

Admissions Policy

Admission to most SHRS undergraduate programs is on a competitive basis as class sizes are limited. Students are strongly encouraged to complete as many prerequisites as possible prior to applying and to apply by the application deadlines published by the individual departments. Applications will be evaluated, and qualified applicants will be admitted until classes are filled. Visit SHRS Programs and Course Offerings for individual department and program admission policies.

Admission Requirements

General admission requirements for the SHRS baccalaureate degree programs include a cumulative grade point average (GPA) of at least 2.500 based on 4.000 (a 3.0 is required for accelerated programs) and successful completion of a minimum of 60 college-level credits, which includes specific prerequisite courses. If letter grading is available, all prerequisite courses must be taken for a letter grade, and a minimum grade of C- is required. (A minimum grade of C is required for all credits transferred from other institutions). SHRS also recommends prior study in a second (foreign) language and prior completion of a college-level computer science course.

30 of the 60 credits required for admission must be from four basic content areas, with minimum credits in each of the four areas as listed in the table below. These 30 credits must consist of courses which are equivalent to those taken by students in the first two years of a four-year liberal arts or science degree. Courses from two-year colleges are acceptable if they meet this standard.

Content Area	Minimum Required Credits	Dietrich School of Arts & Sciences General Education categories that align with these requirements
Natural Sciences/Psychology (Introductory basic science or psychology courses)	6	NATURAL SCIENCE (BIOSC, CHEM, NROSCI 1000 only, PHYS, PSY)
Humanities/Social Sciences	6	SECOND LANGUAGE, DIVERSITY, LITERATURE, THE ARTS, CREATIVE WORK, PHILOSOPHICAL THINKING OR ETHICS, SOCIAL SCIENCE, HISTORICAL ANALYSIS, GLOBAL ISSUES, SPECIFIC GEOGRAPHIC REGION, CROSS-CULTURAL AWARENESS (this is a sampling; other categories and courses will also fulfill this requirement).
Oral and Written Communication	6	SEMINAR IN COMPOSITION; students may also take approved COMMRC courses, W courses and upper level writing courses to fulfill this requirement.
Mathematics/Statistics / Computer Science	4	ALGEBRA, QUANTITATIVE & FORMAL REASONING (CS, MATH, STAT courses only)
Total from all four Content Areas must equal 30 credits		

Students with questions about identifying specific courses that will satisfy the prerequisites for our undergraduate program should contact the SHRS Admissions Office at admissions@shrs.pitt.edu or 412-383-6558.

Application Procedures

Freshman application is made through the Office of Admissions and Financial Aid. SHRS is an upper-division school and does not admit students to its undergraduate programs at the freshman level. Therefore, students must first be admitted to another school at the University of Pittsburgh or to another institution. (See Pittsburgh campus Freshman Admissions section of this catalog for more information.)

Transfer students who have previously enrolled at a college or university other than the University of Pittsburgh, including former University of Pittsburgh students who have since earned college credits at another institution and now wish to return to the School of Health and Rehabilitation Sciences must complete a University of Pittsburgh *transfer* application, submit an application fee to the University of Pittsburgh's Office of Undergraduate Admissions and Financial Aid and complete the supplemental information required for SHRS. (See Transfer Student Admissions section of this catalog for more information.)

International applicants must complete the International Undergraduate Student application and the supplemental information required for SHRS. (See International Undergraduate Student Admissions section of this catalog for more information.)

University of Pittsburgh students applying to the Athletic Training, Communication Science, Dietitian Nutritionist Program, Emergency Medicine, Health Information Management, Nutrition Science, and Rehabilitation Science programs must complete the SHRS Apply Yourself application. An application fee is not required of current Pitt students applying to the SHRS undergraduate programs.

The following information is required as part of the application process:

1. Essay: See individual program admission pages on SHRS website, for specific essay requirements. This essay should be no longer than two pages.
2. The Athletic Training, Emergency Medicine, Health Information Management, Nutrition Science and Rehabilitation Science programs require one letter of recommendation that can be submitted electronically through the online application by the applicant's reference. Pitt students are not required to provide a letter of recommendation for the Communication Science program. Three letters of recommendation are required for the Dietitian Nutritionist Program (accelerated BS/MS).
3. Transcripts: University of Pittsburgh students are not required to submit University of Pittsburgh transcripts. However, we do require transcripts from all other colleges and universities where credit was earned. If transcripts have already been provided to the University of Pittsburgh applicants may request copies from the Student Records Office of their current school. Transfer applicants must submit official high school transcripts as well as transcripts from all college and universities attended to the Office of Admission and Financial Aid. Credits shown on a transcript as transfer credits from another institution cannot substitute for the official transcript of the college or university at which the credits were earned.
4. A resume is required for the Undergraduate program in Rehabilitation Science. While not required for the other undergraduate programs, a resume is highly encouraged.

University of Pittsburgh students applying from the University of Pittsburgh in Bradford, Greensburg, Johnstown and Titusville should follow the same guidelines as stated above for students at the University of Pittsburgh. A Relocation Form should only be submitted to the regional campuses if a student is admitted to a program at SHRS to facilitate the transfer of student records.

Advanced Standing on Admission

Students enter SHRS as juniors with 60 advanced standing credits. (Exception is the Emergency Medicine Senior Transfer option for paramedics and active duty military applicants. These students are granted 90 advanced standing credits and admitted as seniors.)

Students are expected to take all core courses required by their program at SHRS; however, students with more than 60 credits of undergraduate coursework completed at a four-year academic institution may be granted up to 30 additional credits pending approval of the Program Director. The Program Director must:

- review and approve these additional credits
- indicate additional classes/credits on the student's Plan of Study, and
- submit to the Director of Student Services, Registrar a request to accept additional credits
- all required academic work for a degree in SHRS, including courses for which advanced- standing credit has been granted, must be completed within ten (10) consecutive calendar years. Departments have the discretion to lessen this number for specific coursework deemed integral to the course of study in a particular discipline

See **Allowable Credits** section of this catalog for additional information about advanced standing.

Admission Status

Students are admitted to SHRS on one of the following statuses: full, conditional or non-degree.

- Full status is granted to those who have met all admission criteria and have been admitted either as full-time or part-time students for study toward the baccalaureate degree. Students enrolled in accelerated programs must maintain a 3.000 minimum GPA to progress from the undergraduate to graduate portion of their program.
- Conditional status is granted to those who are in the process of completing prerequisite courses. These students must complete all requirements successfully prior to matriculation. At the discretion of the Department Chair students may to be admitted to an SHRS undergraduate program with a maximum of two courses of prerequisite work remaining to be taken in their designated program. Any outstanding prerequisite work taken while enrolled in an SHRS undergraduate program must be completed by the end of the fall term of the senior year.
- Non-degree status is granted to those who enroll at SHRS to take courses for credit without reference to a degree

Reinstatement

Reinstatement is not guaranteed. Students who have been dismissed from SHRS for academic reasons or who have not enrolled at SHRS for three consecutive terms may apply for reinstatement. To request reinstatement a student must initiate the request via a letter to the department chair. This letter must be submitted at least three months prior to the beginning of the term for which the student is requesting reinstatement. The faculty within

the student's academic program will review the request for reinstatement. The review will be conducted with consideration given to the following criteria:

- A period of one year must have elapsed from the time the student is dismissed to the time in which he/she is reinstated
- Demonstration of academic success since leaving the program
- Demonstration of personal and/or professional development since leaving the program
- Space available within the program of study

Financial Information

Tuition and Fee Rates

Tuition and fee rates are available on the Financial Information page, in the University Catalog. And the tuition chart is online at Undergraduate Tuition & Mandatory Fees.

Full-time students

Undergraduate students registered for 12 to 18 credits in the Fall and Spring Terms are regarded as full-time students, and are assessed the current undergraduate "flat" tuition rate for their academic center.
Undergraduate students registered for fewer than 12 credits are considered part-time, and are billed on a per-credit basis.

Students will be charged per credit for each credit exceeding the maximum full-time credit limit.

Summer Term: All students are billed on a per-credit basis.

Residency/Reduced Tuition

Students who reside in the Commonwealth of Pennsylvania may be eligible for reduced tuition through state appropriations.

Eligibility is determined by criteria outlined in the University of Pittsburgh Guidelines for Determining Eligibility for Reduced Tuition Rates, available online at http://payments.pitt.edu/pa-tuition-rate-eligibility/

Additional Fees

Lab Fees: Lab courses may incur an additional fee to cover laboratory expenses. These fees will be charged to the student directly and will appear on the invoice generated by Student Accounts in addition to tuition and other fees each semester.

Financial Obligation of Students

The University of Pittsburgh has the right to withhold services if a student defaults on any financial obligation until repayment arrangements have been made that are satisfactory to the office or department to which the debt is owed.

Scholarships, Grants and Financial Aid

If you are interested in applying for loans, scholarships, grants, or work study, you should call, write or visit the University of Pittsburgh, Office of Admissions and Financial Aid, Alumni Hall, Pittsburgh, PA 15260, 412-624-PITT, https://oafa.pitt.edu/ See also the SHRS website financial information page.

SHRS Scholarships and Awards

General information on scholarship and awards can be found at: SHRS Financial Information Page on our website. Contact individual departments for information on scholarships and awards specific to your area of study.

SHRS Academic Regulations

Academic Integrity Policy

Students have the responsibility to be honest and to conduct themselves in an ethical manner while pursuing academic studies. Students have the right to be treated by faculty in a fair and conscientious manner in accordance with the ethical standards generally recognized within the academic community (as well as those recognized within the profession). Should a student be accused of a breach of academic integrity or have questions regarding faculty responsibilities, procedural safeguards including provisions of due process have been designed to protect student rights. *SHRS Guidelines on Academic Integrity: Student and Faculty Obligations and Hearing Procedures*.

In addition to the University-wide regulations and standards detailed in the section on General Academic Regulations, each student in SHRS is expected to be familiar with these school-specific regulations and academic Standards:

- It is the student's responsibility to review her/his academic standing, to identify undergraduate program requirements and prerequisites for intended undergraduate program(s) and to monitor their completion.
- All required and prerequisite coursework must be taken for a grade, when letter grade option is available.
- Students must receive a C- or better in each required course and SHRS elective course to earn credit.
- For non-SHRS, non-required coursework, students must earn a grade of D or better (C required for transfer credits).
- All Pitt grades will still appear on the transcript and be calculated into the GPA unless the student repeats the course. However, credits from courses in which student has earned unacceptable grades will not be counted toward graduation.
- Students who receive a grade below a C- in a required course must repeat that course and attain a grade of C- or better.
- Students will not be permitted to register for a course until they attain a C- or better in its prerequisite.
- Failure to receive an acceptable grade after the second repeat of a required course may result in the student being dismissed from the program and SHRS.

Advising

Academic and faculty advisors for SHRS undergraduate students are assigned by the Program Directors. Students are notified of the name of their advisor by their Department.

Change of Advisor

If either the student or his or her assigned advisor prefers, the student can choose another advisor. The student must obtain a *Change of Academic Advisor form*, located on the SHRS website under forms, complete the form and secure the required signatures, and return the form to the Office of Student Services. As a general rule, students who have more than 50% of the credits required for graduation should not initiate change of advisor procedures.

More information on Advisor roles and responsibilities can be found in the SHRS Undergraduate Handbook

Plan of Study

Every student in SHRS must have a Plan of Study, signed by academic/faculty advisor, on file with Student Services by the end of the first semester. Any revisions to the Plan of Study must be approved by the academic/faculty advisor or Department Chair and submitted to Student Services.

To be certified for graduation, students must have successfully completed all courses outlined in their final Plan of Study as well as any other requirements for the degree. A final Plan of Study must be on file in Student Services 4019 Forbes Tower.

Allowable Credits

Some SHRS programs may allow students to earn particular course credits by successful completion of the following:

Advanced Placement (AP) and International Baccalaureate (IB) Credits

See https://oafa.pitt.edu/apply/ap-ib-credit/ for credits and course equivalencies currently granted by the University of Pittsburgh for Advanced Placement and International Baccalaureate examinations.

College Level Examination Program (CLEP)

SHRS does NOT accept CLEP general examination credits.

Credit by Course Examination

The following regulations govern this procedure:

- The individual department shall determine specific courses open to examination
- A student may not earn credit by examination if s/he has previously taken the course
- Student may obtain the form, Credit by Course Examination, from the Office of Student Services (4019 Forbes Tower)
- Enrolled students must apply for examination during the term preceding the term in which the course is scheduled
- Newly admitted students may apply and take the examination early in the term in which the course is taught

The Credit by Course Examination form and a check or money order for the appropriate fee must be processed in the Cashier's Office, G-7 Thackeray Hall, for validation prior to taking the examination. Upon passing the examination, the department will submit the Credit by Course Examination form to Student Services. Students will receive advanced standing credit for the course, which may be applied towards graduation. If a student fails the exam, neither a failing grade nor credits will be posted on the transcript. An exemption examination may be taken only once per course. The faculty of each Department will determine the number of courses that can be exempted by students enrolled in that academic program.

Online Courses

The acceptance of online coursework is at the discretion of the department to which the student is applying. All online coursework must be taken at a regionally accredited institution.

Reserve Officer Training Corps (ROTC)

A total of four (4) ROTC credits earned by students will be accepted for purposes of admission and graduation. Grades for ROTC courses will be included in calculating the student's GPA.

Transfer Credit Policy

At the time of application coursework completed outside the University of Pittsburgh is evaluated by the SHRS Admissions Office to determine if it meets University and SHRS policy required for transfer.

- A maximum of 60 credits can be transferred into the University of Pittsburgh from a two-year degree program; and a maximum of 90 from a four-year college/university
- Courses must be passed with a grade of C or better and must be earned at an appropriately accredited institution
- Courses must have reasonable equivalents at the University of Pittsburgh to be eligible for transfer. When requested, students are responsible for supplying descriptions for courses taken elsewhere
- The number of credits granted for a given course cannot exceed the number awarded for the course on the transcript of the school where the course was taken or the number earned for the corresponding course at the University of Pittsburgh
- Credits earned on the quarter system will be converted into semester credits. A quarter credit is equal to two-thirds of a semester credit (e.g., five quarter-system credits equal three semester credits, and three quarter-system credits equal two semester credits)
- SHRS accepts credits, but not grades, for transfer. Consequently, any courses that are accepted for transfer will be used as credit toward graduation, but will not be calculated into the student's GPA at the University of Pittsburgh
- Contact the SHRS Admissions Office at 412-383-6558 for information about transfer credit evaluation
- Please note: All transfer credits are subject to re-evaluation when a student transfers from one school to another within the University of Pittsburgh.

Transfer Students Credit Evaluation

Upon application, transfer students will receive a formal credit evaluation. Following admission, transfer students will receive formal notification from SHRS indicating which requirements have been satisfied and if any prerequisite coursework or credits are outstanding.

Current SHRS Students taking courses off campus for transfer credit

Current SHRS students in good academic standing (cumulative GPA of at least 2.00), including students admitted to SHRS who need to complete prerequisites prior to starting their program, may attend another accredited institution in order to complete their degree requirements, provided they receive prior approval from the SHRS Dean's office. Students will be required to fill out an approval form and provide appropriate course descriptions. Students will not receive credit for courses taken without advance approval. SHRS students may not enroll in courses outside the University of Pittsburgh in the semester they are graduating from SHRS.

Independent Study

The independent study allows the student to pursue independent academic work for credit. The independent study must be supervised by an SHRS approved faculty member. To register for an independent study, the student must:

- identify and develop an independent study project with independent study supervisor
- complete the *Independent Study form* (Found on the SHRS website)
- have *Independent Study form* approved and signed by the IS supervisor, academic/faculty advisor, and Assistant Dean of Undergraduate Studies
- copy *Independent Study form* as necessary
- submit an *Independent Study form*, *Enrollment form*, and have your advisor send Student Services an approval email to receive a permission number
- enroll online for the independent study course

Clinical Education and Directed Practice

Clinical learning experience is an integral and essential part of SHRS undergraduate entry level professional programs. All students in these programs are required to participate in clinical education. Participation is optional but recommended for students in pre-professional programs. The following is required for all SHRS undergraduate clinical education:

- all clinical education sites must have current contracts with the University of Pittsburgh
- each program's clinical education coordinator will assign students to their clinical education site
- student must use an *Enrollment Form* to register for appropriate clinical education and submit other forms as directed by clinical education coordinator and listed below
- student must provide proof of HIPAA certification with registration
- student must provide proof of Blood Borne Pathogen certification with registration
- students are required to carry personal health insurance
- student must provide proof of having undergone a physical exam and blood work as well as proof of vaccinations
- list of exam and vaccination requirements and required form will be provided by the clinical education coordinator

Some SHRS programs require that students complete clinical education at facilities internal or external to the University and may require completion of: 1) Pennsylvania Department of Human Services Child Abuse History Clearance; 2) Pennsylvania State Police Criminal Record Check; 3) FBI Criminal Record Check to determine whether the student is qualified to participate in clinical education. If these are deemed to be required and the student has not already done so, he/she should immediately start the process of obtaining these three clearances and background checks.

The Commonwealth of Pennsylvania has posted information on how to obtain these clearances and background checks here: http://www.dhs.state.pa.us/findaform/childabusehistoryclearanceforms/S001087.

Additional requirements may also include a drug screen, CPR training, attending orientation sessions, compliance with dress code, and personal transportation. Each program's clinical education coordinator will advise students of additional program or site-specific requirements and instructions on how to submit required documentation to verify completion of all requirements.

Students may be required to travel a distance or to relocate outside the city for their clinical education assignments. All expenses for transportation, housing, food, etc. are the responsibility of the student. Any student who misses clinical education time for any reason must meet with his/her clinical education coordinator to discuss any needed make-up time. See individual program for specific details regarding clinical education.

Health Insurance Portability and Accountability Act (HIPAA)

All SHRS students participating in clinical education or field experience must complete HIPAA certification training prior to beginning at the clinical/field site. No clinical contact in a "covered entity" will be allowed before certification is completed. (Student should see individual department information regarding additional HIPAA certification requirements.)

Procedure for completing HIPAA certification: Go to http://cme.hs.pitt.edu. Look for UPMC HIPAA Security Awareness Training for Physicians (formerly RPF Module 15) and HIPAA Physicians Privacy Awareness Training by UPMC (formerly RPF Module 8). Complete the UPMC HIPAA

Security Awareness Training for Physicians and HIPAA Physicians Privacy Awareness Training by UPMC. Complete the quizzes. Print certificates, complete all information, sign them, and turn them in to your department.

Blood Borne Pathogen Training and Certification

All SHRS students who will be going into a clinical setting must complete Blood Borne Pathogen (BBP) training and certification annually. This certification must be completed prior to the beginning of the term in which the clinical setting will begin. No clinical placement will be allowed before certification is completed.

Procedure for completing online BBP training and certification: Go to http://cme.hs.pitt.edu. Look for Blood Borne Pathogen Training (formerly RPF Module 9). Complete Blood Borne Pathogens Training. Complete the quiz. Print certificate, complete all information, sign it, and turn it in to your department.

Dual Degree Option

Students may pursue dual degrees within SHRS or between SHRS and another school at the University. SHRS follows the University policy concerning dual degrees.

- the student must complete 150 credits accepted by the University
- the student must complete all requirements necessary to complete each degree
- the student must receive both degrees simultaneously
- the student must be admitted and enrolled in SHRS as his/her primary academic center for half the terms necessary to complete both degrees, typically this is 4-5 semesters
- students must contact SHRS Admissions Office, 4021 Forbes Tower, to be admitted prior to the midpoint of their studies

University Honors College

Students enrolled in SHRS programs are eligible for membership in the university Honors College and to participate in earning Honors College recognition. For more information and to learn more about the various levels of engagement, go to the following links for Honors Outside the Classroom Curriculum (OCC), Honors Distinction, and Honors Joint Degree.Honors Distinction Honors OCC

Grading Policy

All SHRS undergraduate programs adhere to the University's grading system and grading policies for graduate students. Please refer to the Office of the University Registrar on Grades or the University Catalog on Grading and Records

Course Grading

The method of evaluation and grading is the prerogative of the course instructor and is based on the course objectives and expectations. SHRS faculty have the option of issuing "+" or "-" grades. SHRS faculty have the option of assigning letter grades or HSU evaluations, as printed in the course catalog and determined at student's enrollment. Students will be apprised of the evaluation procedure by the instructor at the beginning of each course. It is the student's responsibility to request clarification of any evaluation or grading policy.

SHRS (G) Grade Policy

The G grade signifies unfinished course work due to extenuating personal circumstances. Students assigned G grades are required to complete course requirements no later than one year after the term or session in which the course was taken.

Once the deadline has passed, the G grade will be changed automatically to a (NG) - No Grade. The NG grade will remain on the record and the student will be required to re-register for the course if it is needed to fulfill requirements for graduation.

Action required by the student and faculty member for a "G" grade:

- The student, instructor and advisor are to fill out a Completion Agreement of G Grade Credits Form (the form and the SHRS G grade Policy and instructions can be found on the SHRS website)
- A copy of this agreement will need to be submitted to Student Services, no later than the end of the add/drop period for the following term. If the following term is the summer term, then the add/drop deadline date is that of the whole summer term.

Satisfactory/No Credit (S/NC) grading option

Prerequisite and required courses must be taken for a letter grade when available, and a student must earn a C- or better (C for transfer credits). Students planning to apply to SHRS are strongly encouraged to consult their advisor whenever considering the S/NC grading option to make certain the course is not required for the degree being sought in SHRS.

Dean's List for SHRS

The SHRS Dean's List is compiled upon completion of each fall and spring term. The criteria used to determine eligibility for the Dean's List is as follows:

- full-time student status for the term
- minimum GPA of 3.500 for the term
- minimum cumulative GPA of 3.000 (total Pitt)

Enrollment Status

A student must be registered **for at least one credit in a twelve (12) month period** from the time of admission until the degree is granted **in order to maintain active status.** Those students who fail to observe this rule will be placed on inactive status and will have to seek formal readmission in order to continue in the program. If active status is not maintained, the student is not permitted to use University facilities or receive counseling or active supervision by a faculty member, advisor, or committee.

Undergraduate students cannot enroll for more than (18) units without the dean's approval. Only an advisor or the University Registrar's Office can enroll you after you receive approval for the additional unit(s)

Undergraduate students registered for 12 to 18 credits in the Fall and Spring Terms are regarded as full-time students.

Students cannot enroll in courses that meet at the same time

More Information on the enrollment process can be found in the SHRS Undergraduate Handbook.

Enrollment in Graduate Courses

University of Pittsburgh undergraduate students with sufficient preparation are permitted to enroll in certain graduate courses at the University following procedures determined by each school. The graduate credits earned may be counted toward the undergraduate degree if approved by the student's school. These may not be counted as credits toward a graduate degree except as noted below.

Undergraduate students who need fewer than 15 credits to complete requirements for the baccalaureate degree and who intend to continue study toward an advanced degree may be permitted during their final term to register for graduate courses that will later apply toward a graduate degree. The student must obtain written permission from the school of proposed graduate study that the courses may count when and if the student is admitted into the graduate degree program. This privilege should not be granted if the proposed total program exceeds a normal full-time load. Although these credits will appear on the undergraduate transcript, they will not count toward fulfilling undergraduate degree requirements. They will be posted as advanced standing credits on the graduate transcript.

Extended Drop Period

Under special circumstances, undergraduate students may be eligible to drop a course in the third week of the fall or spring semester. Students must meet all of the following criteria to drop a course during the extended drop period:

Students must meet all of the following criteria to drop a course during the extended drop period (Only Fall & Spring term):

- Must be an Undergraduate student and the course you are dropping must be an Undergraduate course.
- Students must remain in full-time status after dropping the course(s).
- Students must review the proposed drop with their academic advisor.

If the student's advisor finds that the student is eligible, the advisor must provide permission to drop via email to the SHRS Student Services Coordinator. **Students do not have access to drop classes during the extended period.**

- The email request must include all student and course information. (Students name, PeopleSoft ID #, Subject, number, section, credits) process the drop(s).

Monitored Withdrawal

After the add/drop period has ended, students may withdraw from a course that they no longer wish to attend by completing a Monitored Withdrawal Request form in the office of the school offering the course. Students must process the Monitored Withdrawal Request form within the first nine weeks of the term in the fall and spring. Because summer sessions vary in length, students should check the University's Academic Calendar for those deadlines. Students should check with the school offering the course for the last day to submit a Monitored Withdrawal Request form. The grade W will appear on the student's grade report and transcript. There is no financial adjustment to students' tuition or fee obligations involved in withdrawing from courses, but withdrawing may jeopardize satisfactory academic progress, financial aid, and assistantships or fellowships.
The form must be signed by the instructor of the course and be returned to the Director of Student Services, Registrar, 4024 Forbes Tower within the first nine weeks of the term in the fall and spring.

Late Withdrawal procedure

Procedure for an Appeal for Late Withdrawal

- After the Monitored Withdrawal deadline has passed, students may appeal to withdraw from a course by submitting an Appeal for Late Withdrawal. Form can be found on the SHRS website, under current students/forms.
- All appeals for late withdrawal must be for non-academic reasons, i.e. medical or family emergencies. If you are trying to withdraw without extenuating circumstances, your appeal will be denied.
    - Appeals must be submitted to the Dean's Office of the school offering the course, regardless of the student's home school.
    - Appeals for Late Withdrawal from SHRS courses should be submitted to 4024 Forbes Tower, to the Registrar, Kellie Beach
- The appeal requires information on the class, including class number, catalog/course number, subject, and course title. This information can be found in your Student Center/PeopleSoft.
- The signature of the instructor-or an email from the instructor indicating the date of last attendance, grade earned, and acknowledgment of your withdrawal-is required. You must print and attach copies of the emails.
- Attach a typed statement explaining the extenuating circumstances which you feel merit consideration of withdrawal beyond the deadline. Please provide relevant documentation, such as certification from a doctor, hospital receipts, an obituary, etc.
    - Please address the documentation and the letter to SHRS, Associate Dean for Undergraduate Studies, Dr. Kevin Conley
    - Please include your PeopleSoft ID and your University of Pittsburgh e-mail address on each submitted document.
    - Please sign and date each document.
- You will be notified of the Associate Dean's decision via your student email account.
- Appeals for late withdrawal must be submitted before the end of the 13th week of the semester. After the 13th week, students can only appeal to withdraw from the entire semester.
- If your request is approved and you accept the grade of "W" there is no tuition adjustment for withdrawing from the course.

Repetition of Courses

Consult your dean's office for the proper procedure of repeating a class and for information on how this will affect your grades and the calculation of your Grade Point Average (GPA). When you repeat a class, you must officially enroll and pay for the class again. University policy prohibits any student from attending a class without being officially enrolled for that class. A repeated course, has a notation appearing underneath the previous course taken designating that it is excluded from the GPA. The original course and grade will always remain on your record/transcript.

Students are only permitted to repeat a course twice.

NOTE: Any grade earned in the repeated course will be recorded on the academic transcript, even if it is lower than the original grade.

- A sequence course may not be repeated for credit if the student passes a higher sequence course with a C or better grade.
- A student may not enroll in the same course at another institution and have that grade replace the original grade earned at the University.
- The original course and grade remain on the transcript; however, the grade and credits originally earned are not counted in the calculation of the GPA.
- The grade earned by repeating a course is used instead of the grade originally earned. Withdrawal (W), Repeat (R), and Audit/Non-Credit (N) grades reported for the repeated course will not be identified as a course repeat, and therefore the original grade earned will continue to be counted in the GPA.
- Incomplete grades (G and I) are not identified as repeated courses until the coursework is completed.

- Students seeking to repeat other non-SHRS (prerequisites, electives, etc.) courses will be permitted to do so at the discretion of the program director.

Statute of Limitations on Allowable Coursework

All required academic work for a degree in SHRS, including courses for which advanced- standing credit has been granted, must be completed within ten (10) consecutive calendar years. Departments have the discretion to lessen this number for specific coursework deemed integral to the course of study in a particular discipline.

Resigning from the University for a Specific Term

If students decide to drop all of their courses after the add/drop period has ended and before 60 percent of the term or session has been completed, they must resign from the University for that term. Official resignation from the University requires students to contact the Student Appeals Office. Students have several options. They may resign in person, by mail, or by calling 412-624-7585, where students may leave a message 24 hours a day, including weekends and holidays. An R grade will appear on the student's academic transcript. Tuition is prorated from the date of the student's notification to the Student Appeals Office of the student's desire to resign, unless 60 percent of the term has been completed, in which case there is no refund.

After the 60 percent point of the term or session has passed, students who wish to terminate their registration may process a withdrawal from all classes only with the permission of their academic dean. If the reason for withdrawal is medical or psychological in nature, the academic dean may consult with the director of the Student Health Service prior to making a determination. There is no financial adjustment associated with this procedure, which results in the assignment of W grades for the courses.

Please visit the Student Payment center resignation page on the University of Pittsburgh website for more information.

Leave of Absence

Under special conditions, Undergraduate students may be granted one leave of absence. All requests for a leave of absence need to be put in writing to the Associate Dean of Undergraduate Studies, using the **SHRS Request for Leave of Absence from an Undergraduate Program form**. The length and rationale for the leave of absence must be approved by the Associate Dean. If approved, the time of the leave shall not count against the total time allowed for the degree (statute of Limitations) being sought by the student.

To request of leave of absence, you must complete the SHRS Request for Leave of Absence from and Undergraduate Program form, which can be found on the SHRS website under current students/forms. This form must be submitted it to Student Services on the 4th floor of Forbes Tower for approval.

Note: If the reason for your leave is medical in nature, a formal note from a Doctor must be included with this form.

Academic Probation and Dismissal Policy

Students who have completed at least 12 credits and whose cumulative GPA falls below 2.000 will be placed on academic probation and will receive written notification of this status. At this point it is the student's responsibility to meet with his or her advisor.

To be removed from academic probation, the student will need to achieve a cumulative GPA of 2.000 within his or her next two terms of study. Failure to do so may subject the student to recommendation for immediate dismissal from the program by the Department Chair, in collaboration with the Associate Dean of Undergraduate Studies.

Students who fail to demonstrate progress toward meeting graduation requirements in a timely manner may be placed on academic probation or recommended for dismissal fro the program by the Department Chair in collaboration with that Associate Dean of Undergraduate Studies. SHRS reserves the right to terminate a student at any time for academic or other reasons.

Dismissal from the program is at the discretion of the SHRS Dean. Notwithstanding the foregoing, in the event it is not mathematically possible for a student to remediate their cumulative program GPA within their next two terms of study the student may be immediately dismissed.

A student may appeal their dismissal with the University of Pittsburgh Provost office.

Graduation Requirements

Graduation Requirements for a Bachelor's Degree from the School of Health and Rehabilitation Sciences are as follows:

- satisfactory completion of a minimum of 120 approved credits (including advanced standing)
- minimum of 30 SHRS credits taken once admitted and enrolled in SHRS department or program
- minimum cumulative GPA 2.000
- the GPA will be calculated as a composite of all courses taken at the University of Pittsburgh and counting toward completion of the degree
- completion of all requirements for the program in which student has enrolled
- no outstanding D, F, or G grades in a required course
- updated and approved Plan of Study on file in Student Services, 4019 Forbes Tower
- student must be considered an "active student" at time of graduation; s/he must have been registered for at least one credit at the University of Pittsburgh within the last three terms or sessions
- students may **not** enroll in courses outside the University of Pittsburgh in the semester they are graduating
- An **application for graduation** must be filed in the SHRS Office of Student Services, based on the deadlines determined for that term. Email notification of theses deadlines will be sent to students in the prior term. The graduation application is available on the SHRS website under forms.

A student with outstanding financial obligations to the University is not eligible to receive the diploma, official academic transcripts, or any certification of completion of the academic program.

Graduation with Honors

A baccalaureate degree student attaining an outstanding scholastic record will be graduated with University honors if a minimum of 60 letter-graded credits have been earned at the University of Pittsburgh. The GPA used for the awarding of honors at graduation will be calculated as a composite of courses taken at the University of Pittsburgh and counting toward completion of the degree. The following recognition of academic standing with honors applies:

- Cum Laude 3.250 - 3.490
- Magna Cum Laude 3.500 - 3.740
- Summa Cum Laude 3.750 - 4.000

SHRS Student Organizations

The School of Health and Rehabilitation Sciences has student organizations for undergraduate students. Visit http://www.shrs.pitt.edu/studentgroups/ for more information.

Ombudsperson

SHRS has designated a person within SHRS to be the Ombudsperson.

The Ombudsperson is a person who handles complaints, serves as a mediator, and a spokesperson for the rights of a particular individual or group. The Ombudsperson in the School of Health and Rehabilitation Sciences (SHRS) will be a neutral contact person (Non-faculty) for students with whom they can engage in informal discussions to express concerns about conflicts and other issues that may arise during the course of their education that they believe are difficult to address with their academic department.

The Ombudsperson for SHRS is Kellie Beach, Director of Student Services, and Registrar. She can be reached at kbeach@pitt.edu to make an appointment. More information on the role of the Ombudsperson for SHRS can be found on the SHRS website under the Orientation page.

School of Health and Rehabilitation Sciences Faculty

SHRS Faculty

Program and Course Offerings

Department of Sports Medicine and Nutrition

The Department of Sports Medicine and Nutrition offers outstanding undergraduate programming in Athletic Training as well as Nutrition and Dietetics with the mission to provide superior academic, clinical and research opportunities for students interested in a career in the areas of Athletic Training, Sports Medicine, Nutrition, Dietetics and Human Performance. SMN is committed to promoting intellectual curiosity, ethical practice, critical thinking and professional responsibility in students as well as the faculty and staff who contribute to all facets of the department's infrastructure.

The department aims to meet these objectives by:

- developing cognitive skills, psychomotor mastery, and affective values in students through the delivery of a proven formula of sound classroom education, combined with invaluable clinical education experiences, for the promotion of competent entry-level clinicians and enhancing the health and well-being of individuals and diverse populations
- becoming thought leaders by advancing the state of the science through evidenced-based practice, rigorous curricula, interdisciplinary collaboration and innovative technology
- mitigating injury and disease and optimize human performance by conducting innovative, multidisciplinary basic and applied research, and contributing to the scientific community in order to enhance clinical decisions and education

Major

Athletic Training, BS

The undergraduate athletic training education degree program earned initial accreditation in 1997 and continuing accreditation in 2004 and 2012 through the Commission on Accreditation of Athletic Training Education (CAATE). Prior to this, the curriculum had been National Athletic Trainers' Association approved since 1978. The athletic training curriculum is defined by the current Board of Certification, Inc. Role Delineation Study/ Practice Analysis, which consists of five performance domains to include: (1) Injury and Illness Prevention and Wellness Promotion; (2) Examination, Assessment, and Diagnosis; (3) Immediate and Emergency Care; (4) Therapeutic Intervention; (5) Healthcare Administration and Professional Responsibility. The curriculum is structured to provide both academic and clinical instruction. The academic curriculum includes such courses as anatomy, kinesiology, human and exercise physiology, injury evaluation and treatment, and therapeutic modalities and exercise, among others. This course work provides a foundation for the hands-on clinical experiences provided in the clinical education setting. The students' clinical requirements include direct patient care with athletes and physically active patients and evaluation of skills by preceptors who supervise each student's clinical experience. Students rotate through four on-campus athletic training facilities and several off-site affiliated settings during the clinical education component acquiring valuable skills under the direct supervision of certified athletic training staff, team physicians and other allied health professionals. Upon completion of the four-year baccalaureate degree, students are eligible to sit for the BOC, Inc. certification examination. Successful completion of this exam affords the candidate a variety of employment opportunities including athletic training positions at the high school, college, or university level; sports medicine and rehabilitation clinics; and professional athletic teams. Additionally, many students pursue graduate education opportunities in a number of sports medicine-related professions.

For more information, please contact:

Amy E. Aggelou, PhD, LAT, ATC

Program Director, Athletic Training Education

School of Health and Rehabilitation Sciences

Department of Sports Medicine and Nutrition

4047 Forbes Tower

412-383-9738

Fax: 412-383-6636

E-mail: aaggelou@pitt.edu

Admission Requirements:

- Overall minimum GPA of 2.50
- Completion of all prerequisites

- Personal interview
- Personal qualities important for athletic training, i.e., enthusiasm, motivation, positive health habits, strong work ethic, and time commitment

Prerequisite Courses:

1. Completion of the following

Completion of	Credits
1. Foundations of Biology/Lab: BIOSC 0150/BIOSC 0050	4
2. General Chemistry/Lab: CHEM 0110	4
3. Introduction to Physics: PHYS 0110	3
4. Mathematics, Algebra: MATH 0031	3
5. Statistics, Basic Applied Statistics: STAT 0200	4
6. Psychology, Introduction to Psychology: PSY 0010	3
7. Developmental Psychology: PSY 0310	3
8. English Composition: ENGCMP 0200 minimum	6
9. Writing Intensive Course: ENGCMP 0400 recommended	3
10. Public Speaking: COMMRC 0520	3
11. Humanities Electives:	6
12. Basic Athletic Training: ATHLTR 1811	3
13. Basic Athletic Training Lab: ATHLTR 1812	1

A grade of C- or better is required for 1-11.
A grade of B or better is required for 12-13.
46 credits of prerequisite course work
14 additional credits of elective course work required

2. Successful completion of at least 60 credits of course work.

3. EMT certification is required through course for credit or other qualified course leading to the EMT or NREMT credential. Verification of completion of EMT certification must be provided to the program director no later than May 31 in the year in which they are applying to the program.

4. Forty-five clinical observation hours under the direct supervision of a certified athletic trainer at the University of Pittsburgh. These hours are made available to students who are registered for ATHLTR 1812 - BASIC ATHLETIC TRAINING LAB.

5. Completion of admissions application including Technical Standards for admission.

6. The Athletic Training Education Program at the University of Pittsburgh is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the Athletic Training Education Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (Commission on Accreditation of Athletic Training Education [CAATE]).

   The following abilities and expectations must be met by all students admitted to the Athletic Training Education Program.

   Candidates for selection to the Athletic Training Education Program must demonstrate:

- The mental capacity to assimilate, analyze, synthesize, integrate concepts, and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm.
- Sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and accurately, safely, and efficiently use equipment and materials during the assessment and treatment of patients.
- The ability to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds; this includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak the English language at a level consistent with competent professional practice.
- The ability to record the physical examination results and a treatment plan clearly and accurately.
- The capacity to maintain composure and continue to function well during periods of high stress.
- The perseverance, diligence, and commitment to complete the athletic training education program as outlined and sequenced.
- Flexibility and the ability to adjust to changing situations and uncertainty in clinical situations.
- Affective skills and appropriate demeanor and rapport that relate to professional education and quality patient care.

  Candidates for selection to the Athletic Training Education Program will be required to meet these Technical Standards with or without reasonable accommodation.

Application Procedures:

Admission to the Athletic Training Education Program requires successful completion of a minimum of 60 credits and enrollment in ATHLTR 1811 and ATHLTR 1812. Notification of admission occurs following a personal interview with the athletic training faculty and verification of completion of all prerequisite criteria. The deadline for submission of an application for admission consideration is March 15 annually.

Pitt Students (including regional campuses)

Complete the SHRS ApplyYourself Application.

Transfer Student Information:

Students with prior athletic training experience seeking to transfer to the University of Pittsburgh for admission to the Athletic Training Education Program must complete the same pre-requisite requirements as all other candidates including the Basic Athletic Training class (ATHLTR 1811) and Basic Athletic Training Lab (ATHLTR 1812) courses and all observation hours. If admitted to the program, all students must complete University of Pittsburgh core athletic training courses. In some instances, credit may be given for other coursework taken at another institution and will be evaluated on an individual case basis.

Transfer students must apply to the University of Pittsburgh by completing the Office of Admission and Financial Aid's Transfer Application and selecting Athletic Training as their intended field of study. International transfer students click here.

Curriculum:

The following course sequence is identical for all athletic training students in the junior and senior years.

Junior Year-Fall Term

- REHSCI 1200 - HUMAN ANATOMY
- REHSCI 1205 - HUMAN PHYSIOLOGY
- ATHLTR 1821 - INJURY EVALUATION AND TREATMENT 1
- ATHLTR 1824 - ATHLETIC TRAINING PRACTICUM 1
- ATHLTR 1831 - THERAPEUTIC MODALITIES AND LAB

Total: 18

Junior Year-Spring Term

- REHSCI 1220 - KINESIOLOGY AND BIOMECHANICS

- ATHLTR 1822 - INJURY EVALUATION AND TREATMENT 2
- ATHLTR 1832 - THERAPEUTIC EXERCISE AND LAB
- ATHLTR 1833 - STRENGTH AND CONDITIONING
- ATHLTR 1835 - ATHLETIC TRAINING PRACTICUM 2

Total: 15

Senior Year-Fall Term

- HRS 1006 - INTRO TO HUMAN NUTRITION
- REHSCI 1215 - EXERCISE PHYSIOLOGY
- REHSCI 1235 - MEDICAL TERMINOLOGY
- ATHLTR 1885 - INTRODUCTION TO EVIDENCE BASED REHABILITATION
- ATHLTR 1823 - ADMINISTRATIVE ASPECTS OF ATHLETIC TRAINING
- ATHLTR 1841 - ATHLETIC TRAINING PRACTICUM 3
- Elective (1-3)

Total: 14-18

Senior Year-Spring Term

- REHSCI 1265 - PHARMACOLOGY IN REHABILITATION
- ATHLTR 1834 - SPECIAL TOPICS IN ATHLETIC TRAINING
- ATHLTR 1842 - ATHLETIC TRAINING PRACTICUM 4
- ATHLTR 1843 - ADVANCED ORTHOPEDIC ASSESSMENT
- ATHLTR 1866 - PSYCHOLOGY OF SPORT
- Elective (1-5)

Total: 14-18

Total Prerequisite Credits: 60

Total SHRS Credits: 61-69

Total Degree Credits: 121-129

Nutrition Science, BS

Nutrition Science is the study of how food and nutrients affect health. The program's focus on nutrition, health and disease, and the biological sciences makes the Nutrition Science program an ideal undergraduate degree for students who are planning to pursue health-related graduate programs such as medicine, physician assistant studies, dental medicine, nursing, physical therapy, occupational therapy, or public health. The program also provides a solid foundation for career opportunities in the food industry, research, public policy, and public health.

This program does not meet the eligibility requirements for Registered Dietitian/Nutritionists (RDNs). For students desiring to become a Registered Dietitian/Nutritionist (RDN) please refer to the Dietitian Nutritionist program.

For more information, please contact:

Lori Cherok, PhD, RDN, LDN

Interim Program Director, Nutrition Science

School of Health and Rehabilitation Sciences

Department of Sports Medicine and Nutrition

4042 Forbes Tower

412-383-6566

E-mail: lcherok@pitt.edu

Admission Requirements:

- A minimum cumulative GPA of 2.5 (based on 4.0)
- A minimum prerequisite GPA of 2.5
- A minimum grade of C- in all courses designated as prerequisites taken at the University of Pittsburgh. A minimum grade of C or better is required for courses taken elsewhere.

Admission to the Nutrition Science program requires successful completion of a minimum of 60 credits including all prerequisite courses below.

Prerequisite Courses:

1. Foundations of Biology 1, BIOSC 0150 - 3 credits
2. Foundations of Biology 2, BIOSC 0160 - 3 credits
3. Biology Lab BIOSC 0057 or BIOSC 0058 - 1 credit
4. Introduction to Microbiology, BIOSC 1850 - 3 credits*
5. General Chemistry 1 with Lab, CHEM 0110 - 4 credits
6. General Chemistry 2 with Lab, CHEM 0120 - 4 credits
7. Organic Chemistry 1, CHEM 0310 - 3 credits**
8. Organic Chemistry 2, CHEM 0320 - 3 credits**
9. English Composition, ENGCMP 0200 - 3 credits
10. Research Writing or Intensive Writing Course, ENGCMP 0450 - 3 credits
11. Algebra or Higher Math, MATH 0031 - 3 credits
12. Introduction to Psychology, PSY 0010 - 3 credits
13. Statistics, STAT 0200 or STAT 1000 - 4 credits
14. Introduction to Human Nutrition, NUTR 1006 or HRS 1006- 3 credits
15. Humanities or Social Sciences - 6 credits

* Students can also take HRS 1025 Introduction to Microbiology or NUR 0031 Microbiology instead of BIOSC 1850.

** CHEM 0350: Principles of Organic Chemistry, taught at the University of Pittsburgh, may be taken in place of Organic Chemistry 1 and 2; however, students should first investigate organic chemistry requirements of graduate programs specific to their professional goals.

Application Procedures:

The deadline for submission of an application for admission consideration is March 15th annually.

Pitt Students (including regional campuses)

Complete the SHRS ApplyYourself Application.

Transfer Student Information:

Transfer students must apply to the University of Pittsburgh by completing the Office of Admission and Financial Aid's Transfer Application and selecting Nutrition Science as their intended field of study. International transfer students click here.

All applicants must:

- Submit a personal essay discussing why you are interested in the Nutrition Science program, your professional goals including how and when you became interested in that field, as well as any work or volunteer experience you have that will demonstrate your awareness of the field. Also include other areas of interest, extra-curricular activities and leadership experiences.
- Resumes are strongly recommended.

- Submit one letter of recommendation. A recommendation from a college instructor/professor or recent work or volunteer supervisor is preferred.
- Submit official transcripts from all institutions from which they have college credits. Current University of Pittsburgh students do not need to provide their University of Pittsburgh transcript, and can request copies of transcripts previously submitted to Pitt from their current school. Students currently at the Dietrich School of Arts & Sciences can obtain copies of non-Pitt transcripts from the Office of Student Records, 140 Thackeray Hall, and drop them off in the SHRS Admissions Office, 4020 Forbes Tower.
- Application may be submitted while course requirements are in progress.

Please note that admission is competitive. Meeting the minimum admission criteria does not guarantee admission.

Curriculum:

The BS degree in Nutrition Science requires the completion of a minimum of 120 credits which includes 60 credits prior to admission and 60 credits of required courses taken within the program. The usual time required to complete the program after admission to the junior year is two years. The program currciulum is as follows:

Junior Year - Fall Term

- BIOSC 1000 - BIOCHEMISTRY, 3 credits
- HRS 1000 - INTRODUCTION TO RESEARCH, 3 credits
- HRS 1023 - HUMAN PHYSIOLOGY, 4 credits
- NUTR 1620 - NUTRIENT METABOLISM, 3 credits
- NUTR 1602 - NUTRITION ASSESSMENT, 3 credits

Credits: 16

Junior Year - Spring Term

- NUTR 1610 - FOOD APPLICATION, 3 credits
- REHSCI 1235 - MEDICAL TERMINOLOGY or NUTR 1613 - FOOD APPLICATION LAB, 1 credit
- NUTR 1614 - NUTRITION CRITICAL THINKING, 3 credits
- NUTR 1625 - NUTRITION THERAPY, 4 credits
- ELECTIVE, 3 credits

Credits: 14

Senior Year - Fall Term

- BIOSC 0350 - GENETICS, 3 credits
- NUTR 1622 - LIFE CYCLE NUTRITION, 3 credits
- PUBLIC HEALTH NUTRITION, 3 credits
- ELECTIVES, 6 credits

Credits: 15

Senior Year - Spring Term

- NUTR 1612 - FOOD AND CULTURE, 3 credits
- REHSCI 1250 - PATHOPHYSIOLOGY/HUMAN DISEASE, 4 credits
- HEALTH/PUBLIC HEALTH COURSE REQUIREMENT, 3 credits
- PRACTICAL EXPERIENCE, 2 credits
- ELECTIVE, 3 credits

Credits: 15

Total Program Credits: 60

Total Degree Credits: 120

Joint Major

Nutrition and Dietetics, BS/MS

Students who choose to pursue Pitt's Dietitian Nutritionist Program degree are ahead of the game! In 2024, all Registered Dietitian/Nutritionists (RDNs) entering the field will be required to have a masters level degree to enter the profession. The program is a competency-based educational program that integrates experiential learning with didactic coursework to enable students to demonstrate the higher level of competence that will be needed for future practice as a Registered Dietitian Nutritionist.

Interested students will apply in the Spring Term of each year to begin the program as juniors or graduate students in Fall Term. For incoming Pitt freshmen, a guaranteed admit will be available to enable students to complete the BS/MS degree in 5-years by following the recommended course schedule.

For more information, please contact:

Deborah A. Hutcheson, DCN, RDN, LDN
Program Director, Dietitian Nutritionist Program
4036 Forbes Tower
412-383-6747
Fax: 412-383-6636
E-mail: dhutches@pitt.edu

About

The Dietitian Nutritionist Program, housed within the Department of Sports Medicine and Nutrition, is an accelerated BS/MS graduate degree program accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) as a Future Education Model Graduate Degree Program. The competency-based educational program that integrates experiential learning with didactic coursework affording graduates a strong foundation in medical nutrition therapy, public health nutrition, and food service. Students may apply for a specialty rotation option that provides an immersive experience in a specialty practice area.

This accelerated program offers points of entry for:

- qualified undergraduates
- post-baccalaureate candidates
- graduates of Didactic Programs in Dietetics (DPD)

Undergraduate students will earn both Bachelor of Science and Master of Science degrees. Students who enter the program with a bachelor's degree will earn a Master of Science. Preparation for a career in dietetics as a Registered Dietitian Nutritionist (RDN) requires the following:

- completion of an ACEND accredited degree-granting program
- completion of an ACEND accredited supervised experiential practice and meeting all required competencies*
- successful performance on the national Registration Examination for Dietitians**

No matter your professional goals in the Dietetics profession, this program offers an entry-level and/or advanced degree option to provide a competitive edge for today's health care environment. Upon successful completion of the master's program graduates are eligible to take the national registration examination for Dietitians. Graduates passing the registration exam are eligible for licensure in Pennsylvania by the Board of Nursing. For licensing information please visit Instructions for Licensed Dietitian-Nutritionist (LDN) Applicants.

*This program provides supervised experiential practice required to become an RDN. The supervised experiential practice sites are randomly assigned and public transportation is not available to all sites. All students should anticipate the necessity of having a car accessible to them for Year 2 and Year 3 of the program. Please review the experiential practice information.

**The credentialing exam requirements are set by the Commission on Dietetic Registration (CDR).

For more information on becoming an RDN, visit www.eatright.org.

Program Requirements

Admission

There are three ways to enter the Dietitian Nutritionist Program. As an undergraduate, a post-baccalaureate, and as a graduate of a Didactic Program in Dietetics (DPD).

Prerequisite Requirements for Undergraduate & Post Baccalaureate Students

Completion of the following courses for a letter grade:

- General Chemistry 1 & 2 with lab, 8 credits
- Organic Chemistry 1 & 2, 6 credits (CHEM 0350, 3 credits, taken at Pitt will fulfill the requirement)
- Foundations of Biology 1, 3 credits
- Foundations of Biology 2, (genetics content) or Intro to Genetics, 3 credits
- Biology lab, 1 credit
- Intro to Microbiology, 3 credits (Food Microbiology will not fulfill the requirement)
- *Biochemistry, 3 credits
- Algebra (or higher math), 3 credits
- Statistics, 4 credits
- English Composition, 3 credits
- English Writing (W course), 3 credits
- *Introduction to Nutrition, 3 credits
- +Intro to Dietetics, 2 credits
- +Food and Culture, 3 credits
- Introduction to Psychology, 3 credits
- Communications, 3 credits
- Business or Economics, 3 credits
- Humanities or Social Science, 3 credits
- Electives, 6 (*Elective credits may be split into multiple courses ie. Freshman Program, Physical Education, First Aid/CPR, etc.)

*These courses need to have been completed within the past five years.

+These courses can be taken in the first year of the Dietitian Nutritionist Program for BS and Post Baccalaureate entryway students.

Additional Requirements for DPD Students

Additional Prerequisites for students who have completed, or who are currently completing, a Didactic Program in Dietetics (DPD) are outlined below:

- Nutrition Assessment, 3 credits
- Nutrition Education, 3 credits
- Nutrient Metabolism, 3-6 credits
- Food Applications with Lab, 4 credits
- Food Service Management, 3 credits
- Life Cycle Nutrition, 3 credits
- Nutrition Therapy, 3 credits

Additional Requirements

- Minimum cumulative and prerequisite GPA of 3.0 (based on 4.0)
- A minimum grade of C- in all courses designated as prerequisites taken at the University of Pittsburgh; a C or better is required for transfer.

Application Deadline

March 15; however, we encourage students to apply prior to the deadline as the program will begin reviewing applications and interviewing in January.

All applicants must:

- Complete the SHRS ApplyYourself application;
- Submit a self-evaluation essay, discussing strengths, skills and experiences that will contribute to success in the program and your professional goals as a registered dietitian;
- Submit resume demonstrating evidence of adequate exposure to the field of dietetics and an appreciation of the breadth, depth and scope of practice. This can be accomplished through either volunteer or paid work experience in a nutrition and dietetics related settings; there is no minimum number of hours required;
- Submit three letters of recommendation: one from a registered dietitian, one from a supervisor in volunteer or work experience and one form a college professor. These letters should address the applicant's academic, professional and personal attributes and potential for meaningful graduate study. At least one letter should speak to your leadership experience and commitment to service;
- Submit official transcripts from all colleges and universities attended; a minimum cumulative grade point average of 3.0 based on a 4.0 scale is required.

Applications can be submitted when course requirements are in progress.

Admission is for the fall term only.

International Applicants

International applicants, please review specific requirements here.

Technical Standards

All candidates and graduates must possess the essential physical, cognitive and behavioral abilities considered necessary for students admitted to this program to achieve the knowledge, skills and competencies of an entry-level dietitian. Candidates with disabilities will be considered on a case by case basis. The following link provides detailed information on technical standards.

Please note that this program requires students to complete portions of their education (e.g., supervised experiential practice experiences) at facilities external to the University to meet requirements for graduation. Many of these external facilities require screening measures such as, but not limited to, criminal background check, child abuse clearance, health appraisal, fingerprint-based background check and/or drug test prior to placement at the facility. The results of these requirements may limit and potentially eliminate placement options for the student which can, in turn, result in an inability to meet graduation requirements. Additionally, a conviction of a misdemeanor, felony, or felonious or illegal act abuse may prevent the student from becoming credentialed and/or licensed to practice in the field.

The University of Pittsburgh, as an educational institution and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, the University prohibits and will not engage in discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, disability, or status as a disabled veteran or a veteran of the Vietnam era. Further, the University will continue to take affirmative steps to support and advance these values consistent with the University's mission. For information on University equal opportunity and affirmative action programs and complaint/grievance procedures, contact the Office of Affirmative Action, 901 William Pitt Union, University of Pittsburgh, Pittsburgh, PA 15260, 412-648-7860412-648-7860.

The Dietitian Nutritionist Program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) the accrediting agency for the Academy of Nutrition and Dietetics (A.N.D.), (ACEND@eatright.org), phone (1-800-877-1600 or 1-800-877-1600 x5400), or mail (120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995).

Program Mission, Goals and Objectives

The mission of the Dietitian Nutritionist Program is the development of graduates with the competence and advanced skills to practice effectively as entry-level Registered Dietitian Nutritionists (RDN) to enhance the health and wellbeing of individuals and diverse populations. In addition, the vision is to lead among dietetics programs in advancing knowledge, skills, and evidence-based practice of RDNs.

The program goals are:

1. Development of graduates with the competence and advanced skills to practice effectively as entry-level Registered Dietitian Nutritionists (RDN).

2. To prepare entry-level graduates with advanced knowledge and skills that contribute to the evidence-informed practice of RDNs.

Program outcomes are available upon request.

Curriculum

Students entering as a junior will complete 156 credits and students entering with a baccalaureate degree that is not from a Didactic Program in Dietetics (DPD) will complete 93-95 credits during this three-year program. Didactic Program in Dietetics (DPD) graduates will complete Year 2 & Year 3 of the program fulfilling a 60-credit course of study.

First Year

Fall Term

- HRS 1000 - INTRODUCTION TO RESEARCH
- NUTR 1602 - NUTRITION ASSESSMENT
- NUTR 1620 - NUTRIENT METABOLISM
- NUTR 1622 - LIFE CYCLE NUTRITION
- HRS 1023 - HUMAN PHYSIOLOGY
- NUTR 1600 - INTRODUCTION TO DIETETICS (If not taken previously) Credits / Units: 16-18

Spring Term

- NUTR 1605 - PRINCIPLES OF NUTRITION EDUCATION
- NUTR 1604 - FOOD SERVICE MANAGEMENT WITH LAB
- NUTR 1612 - FOOD AND CULTURE (If not taken previously) or Advisor approved elective
- NUTR 1610 - FOOD APPLICATION
- NUTR 1613 - FOOD APPLICATION LAB
- NUTR 1625 - NUTRITION THERAPY

*Students must maintain a 3.0 minimum GPA to matriculate from Year 1 to Year 2 of the program.

Second Year

Didactic Program in Dietetics (DPD) graduates will enter the Dietitian Nutritionist Program here.

Fall Term

- HRS 2004 - PATHOPHYSIOLOGY ACROSS THE LIFE SPAN
- HRS 2650 - EXERCISE PHYSIOLOGY + HRS 2999 Independent Study (with advisor permission)
- HRS 2623 - ADVANCED MEDICAL NUTRITION THERAPY 1
- HRS 2631 - NUTRITION FOCUSED PHYSICAL EXAMINATION
- HRS 2635 - PROFESSIONAL DEVELOPMENT
- Elective, 3 credits - Advisor approved

Spring Term

- HRS 2624 - ADVANCED MEDICAL NUTRITION THERAPY 2
- HRS 2625 - NUTRITION COUNSELING METHODS
- HRS 2646 - FUNCTIONAL NUTRITION
- HRS 2655 - RESEARCH METHODS AND APPLIED STATISTICS
- Elective, 3 Credits - Advisor approved

Undergraduate students will receive a BS in Nutrition Science after successful completion of the Year 2.

Third Year

Fall Term

- HRS 2654 - Practicum in Dietetics
- HRS 2647 - Experiential Practice: Community Nutrition
- HRS 2648 - Experiential Practice 1
- HRS 2649 - QI Research Project Development

Credits / Units: 15

Spring Term

- HRS 2008 - Entrepreneurial Skills for Nutrition Professionals
- HRS 2656 - Practicum in Dietetics, 1 credit
- HRS 2651 - Experiential Practice 2, 7 credits
- HRS 2652 - Experiential Practice 3, 3 credits
- HRS 2653 - QI Research Project, 1 credit

Credits / Units: 15

All students will receive a Master in Science and a Verification Statement after the successful completion of Year 3.

*Courses may vary dependent on transfer courses accepted.

**Each course is offered only once during the academic year, therefore, any departure from completing a course in its planned sequence (for example: failure, for any reason, to satisfactorily complete a required course; an unresolved "G" or "Incomplete" grade) will result in a one year delay in completing the course, the remaining program requirements, and the year of graduation.

Department of Communication Science and Disorders (CSD)

The Department of Communication Science and Disorders offers an undergraduate major in Communication Science. The degree program focuses on the anatomical, physiological, and psychological foundations of communication, as well as, the basic structure of language and the process of speech and language development. The degree program is also designed to develop critical thinking skills including the ability to evaluate scientific information.

This major is particularly appropriate for students considering graduate study and a career in Speech-Language Pathology [SLP] or Audiology [AuD]. (A graduate degree is required for clinical practice in both professions.) Speech-Language Pathology and Audiology are among the most attractive and diverse healthcare and educational professions available. Projections from the U.S. Department of Labor indicate job growth in both Speech-Language Pathology and Audiology. The future of the job market is healthy due to increasing public awareness of the need for early diagnosis and intervention for communication disorders. Other factors impacting employment include increased awareness of the educational, social, and vocational benefits of programs for communication disorders and an aging population. The need for speech, language, and hearing scientists is also great; there are many research and academic opportunities for those interested in research in these fields.

The degree program in Communication Science is also excellent preparation for professional or graduate programs in education-related fields (i.e., education of the deaf and hard of hearing, early-childhood, special education) or health-related professions (i.e., rehabilitation counseling, occupational therapy, physical therapy). The necessary prerequisites for these programs can be taken while completing the Communication Science degree.

Interested students should contact the Interim Director of Undergraduate Education in Communication Science and Disorders, Dr. Cheryl Messick at cmessick@pitt.edu.

Admission Requirements

Students are eligible for admission to the Communication Science degree program after successful completion of 60 credits. [*Note*: Applications will be reviewed when approximately 45 credits are completed and 15 credits are in progress.] For admission, an application with all transcripts from universities/colleges attended and a personal essay is required. Resumes are strongly suggested. A letter of recommendation is **NOT** required. A minimum grade point average (GPA) of 2.75 is required.

Prior to applying, students should contact the Interim Director of Undergraduate Education in Communication Science and Disorders, Dr. Cheryl Messick at cmessick@pitt.edu. (Specialized advising is available to students at the freshman and/or sophomore year level.) Students should complete the Prerequistes prior to admission. They should also focus on completing much of the Additional Requirement Coursework prior to admission. [*Note*: Some of these courses may be completed while enrolled in the program.]

University of Pittsburgh Freshman Guarantee

An entering freshman may qualify for a guarantee into the graduate programs in Audiology or Speech-Language Pathology. For consideration for the Freshman Guarantee, indicate an intended field of study as Pre- Communication Science on your application when applying as a freshman (at regional campuses, choose corresponding codes). Qualifying students admitted in the Fall of 2019 will meet the following criteria: SAT scores of 1410 (combined Critical Reading and Math) or an ACT Composite score of 30. Students must also be in the top 10% of their high school graduating class.

The student must have an overall grade point average (GPA) of 3.6 when applying to the Communication Science program at the start of the spring semester of sophomore year level. At the time of application to the graduate program, guaranteed students must have a cumulative GPA of 3.6 or better and a GPA of 3.75 in the core communication science major courses. Additionally, guaranteed students must achieve a GRE ranking in the 50th percentile or higher for the Quantitative and Verbal sections and a 3.5 on the Analytical Writing section. A full application must be submitted on time.

Early Decision for Graduate Programs

Students pursuing an undergraduate degree in Communication Science from the University of Pittsburgh are eligible to apply Early Decision to either the graduate program in Audiology or Speech-Language Pathology. Information about the application process and applicant qualifications are available in the CSD Advising Office.

Major

Communication Science, BA

The Department of Communication Science and Disorders offers an undergraduate major in Communication Science. The degree program focuses on the anatomical, physiological, and psychological foundations of communication, as well as, the basic structure of language and the process of speech and language development. The degree program is also designed to develop critical thinking skills, including the ability to evaluate scientific information.

This major is particularly appropriate for students considering graduate study and a career in Audiology or Speech-Language Pathology. The degree program is also excellent preparation for professional or graduate programs in education-related or health-related fields, as prerequisites can be taken while completing the Communication Science major.

Specialized advising is available to students at the freshman and/or sophomore year level. Interested students should contact the Communication Science advisor, Dave Bodnar at dab308@pitt.edu.

Admission Requirements

Students are eligible for admission to the Communication Science program after successful completion of 60 credits including the following *Prerequisite* courses and *Additional Requirements*, other admission criteria and an application. Applications will be viewed when approximately 45 credits are completed and 15 credits are in process.

Prerequisites (30 credits)

- English Composition (ENG 0200 or higher) - 3 credits.
- Writing Intensive (W)* - 3 credits.
    - *May be combined with another requirement (e.g., literature, global issues, philosophical thinking or ethics).
- Oral Communication (preferred COMMRC 0500, will also accept COMMRC 0310, 0500, 0530, 0550) - 3 credits.
- Mathematics (MATH 0031 or higher) - 3 credits.
- Statistics (STAT 0200, 1000) - 3 - 4 credits.
- Introduction to Psychology (PSY 0010) - 3 credits.
- Biological Science - a course in human biology (BIOSC 0815, 0150) or human anatomy and physiology (BIOSC 0805, 0041).
- Physical Science - a course in Physics (PHYS 0091, 0110, 0174) or in Chemistry (CHEM 0110 or higher) - 3 credits.
- Open Selection: At least six credits from the additional requirements list below.

Additional Requirements

- Lifespan/Human Development (preferred PSYED 0005 or REHSCI 1245; also allowed PSY 0310) - 3 credits
- Cognitive/Neurological Foundations (PSY 0405, 0410, 0421, 0422, 0505, 0510; NROSCI 0080, 0100) - 3 credits
- Social Science or Quantitative & Formal Reasoning - 3 credits
- English/American Literature - 3 credits
- Global Issues, Diversity, Cross Cultural or Study Abroad courses - as coded by Dietrich School of Arts & Science - 6 credits
- Philosophical Thinking or Ethics - any course coded by Dietrich School of Arts & Science in this category - 3 credits
- Courses used in *Open Selection* prerequisite category count towards these additional requirement credits

Application Procedures

For admission, an application with all transcripts from universities/colleges attended and a personal essay is required by March 15. Resumes are strongly suggested. A letter of recommendation is **NOT** required. A minimum grade point average (GPA) of 2.75 is required (3.0 GPA or higher is strongly preferred).

University of Pittsburgh Freshman Guarantee

An entering freshman may qualify for a guarantee into the graduate programs in Audiology or Speech-Language Pathology. For consideration for the Freshman Guarantee, indicate an intended field of study as Pre- Communication Science on your application when applying as a freshman (at regional campuses, choose corresponding codes). Qualifying students admitted in the Fall of 2020 (2211) will meet the following criteria: SAT scores of 1410 (combined Critical Reading and Math) or an ACT Composite score of 30. Students must also be in the top 10% of their high school graduating class.

The student must have an overall grade point average (GPA) of 3.6 when applying to the Communication Science program at the start of the spring semester of sophomore year level. At the time of application to the graduate program, guaranteed students must have a cumulative GPA of 3.6 or better and a GPA of 3.75 in the core communication science major courses. Additionally, guaranteed students must achieve a GRE ranking in the 50th percentile or higher for the Quantitative and Verbal sections and a 3.5 on the Analytical Writing section. A full application must be submitted on time to the graduate program.

Early Decision for Graduate Programs

Students pursuing an undergraduate degree in Communication Science from the University of Pittsburgh are eligible to apply Early Decision to either the graduate program in Audiology or Speech-Language Pathology. Information about the application process and applicant qualifications are available in the CSD Advising Office.

Communication Science Curriculum

SHRS requires a minimum of 120 credits for graduation.

For specialized advising at the freshman and/or sophomore year level, students should contact the Communication Science advisor, Dave Bodnar at dab308@pitt.edu.

Core Curriculum Requirements (41 credits)

Most of the core courses in Communication Science degree program are taken after admission at the junior year level. Four of the core courses are available at the freshman and sophomore year level or can be completed as part of the Communication Science degree program at the junior year level. Several core courses have prerequisites resulting in a sequence of courses. The course sequence is represented in the example Plan of Study. Interested students should be aware that the core courses or sequence of courses may change.

Core Courses Available to Freshman and Sophomore

The following courses are available to students at the freshman and sophomore year level.

- CSD 1232 - INTRODUCTION TO AUDIOLOGY

- CSD 1230 - INTRODUCTION TO SPEECH LANGUAGE PATHOLOGY
- CSD 1020 - NATURE OF LANGUAGE OR LING 1000 - INTRODUCTION TO LINGUISTICS
- CSD 1102 - INTRODUCTION TO PROFESSIONAL AND CLINICAL ISSUES IN COMMUNICATION SCIENCE & DISORDERS

Plan of Study

This plan of study identifies the sequence of core courses offered in the Communication Science degree program. A course schedule for each semester is completed with any remaining Prerequisites Requirements or Additional Requirements, minor or certificate courses, or other elective courses. Students are required to have an individual advising appointment every semester and to confirm their registration.

Junior Fall

- If not already completed - CSD 1020 - NATURE OF LANGUAGE or LING 1000 - INTRODUCTION TO LINGUISTICS
- If not already completed - CSD 1232 - INTRODUCTION TO AUDIOLOGY
- CSD 1023 - ANATOMY AND PHYSIOLOGY OF SPEECH
- CSD 1027 - LAB IN ANAT/PHYSIOLOGY OF SPEECH
- CSD 1233 - INTRODUCTION TO RESEARCH

Junior Spring

- If not already completed - CSD 1230 - INTRODUCTION TO SPEECH LANGUAGE PATHOLOGY
- If not already completed - CSD 1102 - INTRODUCTION TO PROFESSIONAL AND CLINICAL ISSUES IN COMMUNICATION SCIENCE & DISORDERS
- CSD 1021 - LANGUAGE DEVELOPMENT
- CSD 1026 - SPEECH SCIENCE
- CSD 1030 - LAB IN SPEECH SCIENCE

Senior Fall

- CSD 1024 - ANATOMY AND PHYSIOLOGY OF HEARING
- CSD 1029 - LAB IN ANAT/PHYSIOLGY OF HEARING
- CSD 1022 - TRANSCRIPTION PHONETICS
- CSD 1111 - AURAL REHABILITATION
  (CSD 1111 is optional)

Senior Spring

- CSD 1025 - HEARING SCIENCE
- CSD 1028 - LAB IN HEARING SCIENCE
- CSD 1235 - CLINICAL METHODS IN COMMUNICATION SCIENCE & DISORDERS
- CSD 1234 - WRITTING PRACTICUM FOR CLINICAL METHODS IN COMMUNICATION SCIENCE & DISORDERS
- CSD 1237 - INTRO TO NEUROSCIENCE OF COMMUNICATION
  (CSD 1237 is optional)

Related Area / Minors and Certificates / Directed or Independent Studies

No additional related area is required for this undergraduate degree.

Many students are able to complete certificate programs or minors in addition to the major requirements in *Communication Science*. In recent years, students have attained certificates in Conceptual Foundations of Medicine, Latin American studies, American Sign Language, and Children's Literature and minors in Education, Neuroscience, Linguistics, Social Work and Sociology, among others. These are only a few of the many certificate programs and minors available at the University of Pittsburgh.

In some locations, employment within an educational setting requires additional courses for certification. Students considering work in educational settings should consider enrolling in education courses (i.e., IL 1257 - TEACHING ENGLISH LANGUAGE LEARNERS) as electives. Students can consult with the CSD Advising Office for more information.

Students should consult with Dave Bodnar (dab308@pitt.edu) or Dr. Cheryl Messick (cmessick@pitt.edu), Interim Director of Undergraduate Education in Communication Science and Disorders, about the possibility of pursuing a directed or independent study with a member of the faculty, as a formal approval process is required.

Emergency Medicine Program

The Emergency Medicine Program is designed to meet the growing need for the advanced skill levels required in the EMS profession and to prepare students for the technical, clinical, and administrative challenges of a career in EMS and health care today. Many Emergency Medicine (EM) students continue to medical school, physician assistant, nursing, and other graduate-level education. A Program Fee of $1,500 is charged to each junior student to cover the cost of disposable equipment, supplies, and specialty certifications. Students are required to purchase and wear clinical uniforms designated by the Program and to maintain independent health insurance throughout the entire junior year.

For more information, please contact the program at 412-647-4547.

Major

Emergency Medicine Program

The Emergency Medicine Program is designed to meet the growing need for the advanced skill levels required in the EMS profession and to prepare students for the technical, clinical, and administrative challenges of a career in EMS and health care today. Many Emergency Medicine (EM) students continue to medical school, physician assistant, nursing, and other graduate-level education.

Students entering the Program as Juniors are required to complete clinical education at facilities external to the University, and such facilities require a criminal background check, Act 33/34/73 clearances, physical examination, blood titers, and a drug screen to determine whether the student applicant is eligible to participate with clinical education requirements. Students must be currently certified as an EMT by the Commonwealth of Pennsylvania. Out-of-state and Nationally Registered EMTs must apply for and receive endorsement by certification equaling reciprocity. A Program Fee of $1,500 is charged to each junior student to cover the cost of disposable equipment, supplies, and specialty certifications. Students are required to purchase and wear clinical uniforms designated by the Program and to maintain independent health insurance throughout the entire junior year.

Students entering the Program as a Senior Transfer or Active Duty Military must complete 30 credits within the University of Pittsburgh School of Health and Rehabilitation Sciences to obtain a bachelor degree. Additional details are located under Transfer Student Information and Active Duty Military Student Information areas of the EM catalog section.

For more information, please contact the program at 412-647-4547.

Admission Requirements:

The courses listed below are required of all students working toward the Bachelor of Science in Emergency Medicine.

- Oral*/Written Communications - 6 Credits
- Mathematics/Statistics/Computer Science - 4 Credits
- Natural Sciences/Psychology - 6 Credits
- Historical Change/Social Science (e.g., Anthropology, Economics, English Literature/Writing, Second Language, History, Music, Performing & Visual Arts, Philosophy, Religion, Sociology, etc.) - 6 Credits
- Additional Credits from Above Content Areas - 8 Credits
- EMT with Lab * - 4 Credits
- Additional Coursework - 26 Credits

*Verification of current Pennsylvania or National Registry EMT certification must be provided. If a non-credit course was taken for this certification, 4 credits may be granted through credit-by-course examination. Junior-year students without Pennsylvania EMT certification will be required to apply for and receive reciprocity from the Pennsylvania Department of Health.

For Transfer Senior and Active Duty Military applicants, current Paramedic certification must be demonstrated to receive the advanced standing of 39 credits (includes four credits of EMT). The awarding of 39 advanced standing credits limits the transfer of college credits to no more than 51

credits (including the required 30 prerequisites and 21 additional coursework credits). College classes taken as requirements for obtaining paramedic certification may not be utilized toward the 51 credits.

Application Procedures:

Applications are due March 15 and interviews will begin in January for all applicants. Applications received after the deadline will be reviewed based upon available space. All applicants are encouraged to apply early, as limited seats are available. Applications may be submitted while course requirements are in progress.

All students must have a minimum cumulative GPA of 2.5 (based on 4.0) and minimum prerequisite GPA of 2.5. A minimum grade of C- or better is required for EM prerequisite courses and a grade of D or better is required for additional coursework taken at Pitt. A minimum grade of C is required for transferred credits.

Selection Criteria/Process:

Notification of admission occurs after a personal interview with the Emergency Medicine faculty and evidence of completion of all prerequisite criteria.

Transfer Student Information:

Students are required to earn 30 credits within the University of Pittsburgh School of Health and Rehabilitation Sciences and these may not include prerequisite courses. Senior Transfer students are required to have current certification/licensure as a paramedic and have completed 51 college credits, including the required prerequisite courses. All Senior Transfer and Active Duty Military students will be offered a 3-credit online EM course each semester to fulfill the 30-credit requirement (Beyond the Body will be offered in the fall semester and Organizational Theory will be offered in the spring). Students may take other 3-credit courses within SHRS each semester to fulfill the 30-credit requirement. Senior Transfer students must complete EM core credits in a traditional format; web-based or distance course delivery format is available only to enrolled Active Duty Military students.

Active Duty Military Student Information:

Students who have completed the prerequisite courses, are currently active with the military, and are currently US SOCM ATPs or certified or licensed at the paramedic level (by a state EMS agency or the National Registry of EMT), may be awarded advanced standing and admitted into the Program as Active Duty Military students. During the senior year, these students will be required to complete 30 credits within the School of Health and Rehabilitation Sciences to be eligible for graduation. Web-based delivery format is provided for all core courses.

For additional admission criteria, please refer to the SHRS Admissions section of this catalog.

Emergency Medicine Curriculum

SHRS requires a minimum of 120 credits to graduate, 30 of which must be completed through the School and approved by the EM Advisor.

Fall Term - Junior Year

The EM Program Junior year curricula consists of required courses which are offered only once during the academic year. Any deviation from completing the courses in the planned sequence will result in the delay of progressing through the curriculum and the year of graduation.

- EM 1111 - FOUNDATIONS OF EMERGENCY CARE
- EM 1112 - PATHOPHYSIOLOGY
- EM 1114 - MEDICATION ADMINISTRATION
- EM 1115 - INTRODUCTION TO PHYSICAL ASSESSMENT
- EM 1116 - PHYSICAL EXAM LAB

- EM 1122 - CARDIOLOGY AND RESPIRATORY
- EM 1131 - CLINICAL 1

Spring Term - Junior Year

- EM 1113 - PHARMACOLOGY
- EM 1117 - EMS OPERATIONS
- EM 1123 - CARDIOLOGY LAB
- EM 1124 - ADULT MEDICAL EMERGENCIES
- EM 1125 - OB/GYN, NEWBORN, AND PEDIATRIC CARE
- EM 1126 - ASSESSMENT-BASED MANAGEMENT
- EM 1132 - CLINICAL 2

Fall Term - Senior Year Core Content

- EM 1155 - LEGAL ISSUES IN HEALTH CARE
- EM 1170 - CRITICAL CARE MEDICINE 1
- EM 1166 - SENIOR INTERNSHIP

Spring Term - Senior Year Core Content

- EM 1160 - PROFESSIONAL ISSUES
- EM 1171 - CRITICAL CARE MEDICINE 2

Additional Senior - Level Elective Courses

Electives outside of the EM program shall be approved by your advisor.

- EM 1152 - ISSUES IN HEALTH CARE
- EM 1153 - ISSUES IN HEALTH CARE EDUCATION
- EM 1154 - HEALTH CARE RESEARCH
- EM 1158 - FINANCE AND ACCOUNTING FOR HEALTH CARE
- EM 1168 - LEADERSHIP IN HEALTH CARE
- EM 1177 - SENIOR SEMINAR
- EM 1180 - HEALTH CARE MANAGEMENT
- EM 1185 - BEYOND THE BODY - WEB
- EM 1186 - CERTIFIED AMBULANCE CODER - WEB
- EM 1187 - ORGANIZATIONAL THEORY - WEB
- EM 1199 - INDEPENDENT STUDY
- EM 1250 - INTRODUCTION TO COMMUNITY HEALTH
- EM 1251 - MOBILE INTEGRATED HEALTH CARE
- EM 1260 - COGNITIVE PSYCHOLOGY OF DECISION MAKING
- REHSCI 1200 - HUMAN ANATOMY with Lab REHSCI 1201 Credits / Units: 4
- REHSCI 1205 - HUMAN PHYSIOLOGY with Lab Credits / Units: 4
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1 with Lab NUR 0002 Credits / Units: 4
- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2 with Lab NUR 0003 Credits / Units: 4

Active Duty Military Students

All core coursework for active duty military students is provided in a web-based format.

- EM 1172 - ISSUES IN HEALTH CARE - WEB
- EM 1173 - ISSUES IN HEALTH CARE EDUCATION - WEB
- EM 1174 - HEALTH CARE RESEARCH - WEB
- EM 1175 - LEGAL ISSUES IN HEALTH CARE - WEB

- EM 1183 - FINANCE AND ACCOUNTING FOR HEALTH CARE - WEB
- EM 1181 - PROFESSIONAL ISSUES - WEB
- EM 1176 - SENIOR INTERNSHIP - WEB
- EM 1178 - LEADERSHIP IN HEALTH CARE-WEB
- EM 1182 - CRITICAL CARE MANAGEMENT - WEB
- EM 1177 - SENIOR SEMINAR
- EM 1179 - HEALTH CARE MANAGEMENT - WEB
- EM 1185 - BEYOND THE BODY - WEB
- EM 1187 - ORGANIZATIONAL THEORY - WEB

Transfer Student Information:

Students are required to earn 30 credits within the University of Pittsburgh School of Health and Rehabilitation Sciences and these may not include prerequisite courses. Senior Transfer Students are required to have current certification/licensure as a paramedic and have completed 51 college credits, including the required prerequisite courses. All Senior Transfer and Active Duty Military students will be offered a 3-credit online EM course each semester to fulfill the 30-credit requirement (Beyond the Body will be offered in the fall semester and Organizational Theory will be offered in the spring). Students may take other 3-credit courses within SHRS each semester to fulfill the 30-credit requirement. Senior Transfer students must complete EM core credits in a traditional format; web-based or distance course delivery format is available only to enrolled Active Duty Military students.

*Prerequisites for Clinical Education:

This Program requires junior-year students to complete clinical education at facilities external to the University, and such facilities will require a criminal background check, an Act 33/34/73 clearance, physical examination, blood titers, and a drug screen to determine whether the student applicant is qualified to participate in the clinical education. Students must be currently certified as an EMT by the Commonwealth of Pennsylvania. Out of state and Nationally Registered EMTs must apply for and receive endorsement by certification equaling reciprocity. Additionally, in order to become certified/ licensed, many states will inquire as to whether the applicant has been convicted of a misdemeanor and a felony.

Department of Health Information Management

Accurate, reliable patient data is critical to health professionals, and the health information management department is the key health center for medical staff, administrators, other health professionals, and the community. Due to the increased presence of technology as a key component of health care delivery and the need for quality health care data, more HIM professionals are finding career opportunities in data analytics, business intelligence and in the information systems environment, where they analyze and use health care data, develop, market, and implement software; ensure that systems comply with standards and regulations, and work in support of quality, privacy, and security. The Bureau of Labor Statistics cites health information professionals as one of the 20 fastest-growing occupations in the US. On top of strong job prospects, competitive salaries also await HIM graduates. More than half of new HIM graduates with a bachelor's degree start with salaries in the $50-60,000 range. Please visit www.AHIMA.org for more information on career paths. In addition to course work, the HIM program includes clinical education experiences, which provide valuable hands-on learning for the HIM student.

The health information management program is accredited by the Commission on Health Informatics and Information Management Education (CAHIIM). Following satisfactory completion of all course requirements, the graduate will be awarded the degree of Bachelor of Science and students are eligible to sit for the RHIA (http://www.ahima.org/certification/RHIA) credentialing examination administered by the Commission on Certification for Health Informatics and Information Management (CCHIIM) an affiliate of the American Health Information Management Association (AHIMA) during their last semester of study. For more information, see http://www.shrs.pitt.edu/him/. Results from the 2019 outcomes assessment reported to CAHIIM in the 2020 Annual Program Report (APAR) indicate a 100% employer satisfaction rate, a 100% graduate satisfaction rate and a 83.33% pass rate National Certification Exam.

Contact Information:

Bambang Parmanto, PhD, Chair
Department of Health Information Management
6051 Forbes Tower
412-383-6650
Fax: 412-383-6655
E-mail: him@pitt.edu
http://www.shrs.pitt.edu/HIM/

Major

Health Information Management, BS

Accurate, reliable patient data is critical to health professionals, and the health information management department is the key health center for medical staff, administrators, other health professionals, and the community. Due to the increased presence of technology as a key component of health care delivery and the need for quality health care data, more HIM professionals are finding career opportunities in data analytics, business intelligence and in the information systems environment, where they analyze and use health care data, develop, market, and implement software; ensure that systems comply with standards and regulations, and work in support of quality, privacy, and security. The Bureau of Labor Statistics cites health information professionals as one of the 20 fastest-growing occupations in the US. On top of strong job prospects, competitive salaries also await HIM graduates. More than half of new HIM graduates with a bachelor's degree start with salaries in the $50-60,000 range. Please visit www.AHIMA.org for more information on career paths. In addition to course work, the HIM program includes clinical education experiences, which provide valuable hands-on learning for the HIM student.

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Contact Information:

Bambang Parmanto, PhD, Chair
Department of Health Information Management
6051 Forbes Tower
412-383-6650
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E-mail: him@pitt.edu
http://www.shrs.pitt.edu/HIM/

Admission Requirements

Students are admitted into the health information management program after successful completion of a minimum of 60 credits, including the following prerequisite courses:

- Natural Science (Any Biology, Chemistry or Physics course) - 3 Credits
- Communication (Public Speaking Preferred) - 3 Credits
- Computer Programming - 3 Credits
- Composition/General Writing, 6 Credits
- Mathematics* - 2-3 Credits
- Psychology (Any) - 3 Credits
- Statistics* - 3-4 Credits
- Humanities/Social Sciences - 6 Credits

*A combination of 6 credits of math and statistics is required.

Other admission criteria include minimum cumulative GPA of 2.50 (based on 4.00), and minimum of a C- grade in all courses designated as prerequisite (C required for credit transfer from other institutions); volunteer or paid work experience in the field of health information management is recommended.

Pitt Students (including regional campuses)

Complete the SHRS ApplyYourself online application.

Transfer Students

Transfer students must apply to the University of Pittsburgh by completing the Office of Admission and Financial Aid's Transfer Application and selecting Health Information Management as their intended field of study. International transfer students click here.

All applicants must:

- Submit a personal essay-a brief statement discussing why you are interested in the Undergraduate Program in Health Information Management, your professional goals including how and when you became interested in this field of study. You may also include other areas of interest, extra-curricular activities and leadership experiences;
- Submit one letter of recommendation. Recommendation from a college instructor/professor, recent supervisor, or academic advisor preferred;
- Submit official transcripts from all colleges and universities attended;
- Applications can be submitted when course requirements are in progress.

Applications are reviewed on a rolling basis.

Part-Time Study

Students may pursue this program on a part-time basis. A meeting with the appropriate advisor is recommended.

Progression for the Registered Health Information Technician (RHIT)

Provision for transfer of credits may be made for those students who have satisfactorily completed a junior college health information technology program accredited by the Commission on Health Informatics and Information Management Education (CAHIIM). In addition, the HIM department has an articulation agreement with the Health Information Technology Program at the Community College of Allegheny County, enabling qualified graduates of the HIT program to matriculate into the HIM program at the University of Pittsburgh as juniors.

Clinical Education

Health Information Management undergraduate students participate in clinical education (CE) internships that facilitate a deeper understanding of the professional practice aspects of health information and related health-care areas. The overall goal of the clinical education is to provide students with practical experiences to apply their knowledge and skills that they develop as they progress through the HIM curriculum. Each internship experience provides the HIM student with a different focus, and the opportunity for the student to interact with HIM professionals as well as other professionals in the health care field.

The HIM department has affiliation agreements with approximately 120+ clinical sites for student internships. The following list provides a sample of these sites:

- Adelphoi Village (behavioral health)
- Allegheny Valley Hospital
- Center for Connected Medicine
- Country Meadows Nursing Home
- creehan & company
- Diskriter, Inc.
- Geisinger Health System
- Heritage Valley Health Center
- Intermountain Health Care, Salt Lake City, UT
- Jameson Health System
- M*Modal
- MedAllies
- PA Department of Corrections

- The Innovation Center of UPMC
- Trinity Health System
- UCLA Medical Center
- University of Pittsburgh Dental Informatics
- University of Pittsburgh Cancer Institute (Hillman Cancer Center)
- UPMC Health Plan
- UPMC Health System
- UPMC Physician Services Division
- Wheeling Hospital
- WVU Healthcare

Prerequisites for Clinical Education:

Students must complete certain requirements to be eligible to participate in clinical education. The HIM Clinical Education Coordinator will provide detailed information and time guidelines for completion of these requirements once the student matriculates into the HIM program.

- Physical examination including proof or completion of specific immunizations
- TB test, 2-step
- Pennsylvania Criminal Record Check
- Pennsylvania Child Abuse Clearance
- FBI Background Check (includes fingerprinting)
- HIPAA Training and Certification
- Bloodborne Pathogen Training and Certification
- Students must carry personal health insurance while participating in clinical education
- Students must carry professional student liability insurance coverage while participating in clinical education. This coverage is provided by the SHRS group insurance plan and will appear as a charge on the students' tuition bill.
- Some sites may have additional requirements (i.e. drug screen, influenza vaccine, or orientation programs specific to their organization).
- Clinical Education sites may not allow a student to participate in an internship at their site if the background check reports that they have been convicted of a misdemeanor; a felony; or a felonious or illegal act associated with alcohol and/or substance abuse.
- Current year Flu Shot

Additional Information:

- Travel to clinical education sites is the responsibility of the student. Students are expected to have a car or to provide their own transportation to all remote sites; no exceptions will be made. Not all sites are accessible by public transportation.
- All expenses for transportation, parking, meals, and costs of prerequisites associated with clinical education are the responsibility of the student.
- Approximate cost for clearances is $125 annually, and costs for physical exam and immunization status are dependent on health insurance coverage and provider costs.
- Approximate cost for drug screen is $60.

For more information on Clinical Education, email Patti Anania Firouzan, HIM Clinical Education Coordinator: patti@pitt.edu.

The Pitt Freshman Guarantee

All incoming Pitt freshmen choosing the Pre-Health Information Management major will be granted guaranteed admission for the Master of Science in Health and Rehabilitation Sciences with a concentration in Health Information Management (at regional Pitt campuses, choose corresponding codes).

Program Curriculum

Fall Term-Junior Year

- HRS 1011 - ANATOMY AND PHYSIOLOGY, AND PATHOPHYSIOLOGY, MEDICAL TERMINOLOGY AND PHARMACOLOGY
- HIM 1020 - HEALTH DATA SCIENCE PROGRAMMING USING PYTHON AND R
- HIM 1210 - HEALTH INFORMATION AND THE HEALTH CARE SYSTEM
- HIM 1250 - FOUNDATIONS OF HEALTH INFORMATICS AND INFORMATION MANAGEMENT

- HIM 1430 - LEADERSHIP

Credits: 15

Spring Term-Junior Year

- HIM 1437 - CLASSIFICATION SYSTEMS IN HEALTHCARE
- HIM 1451 - DATABASE DESIGN AND BIG DATA ANALYTICS
- HIM 1452 - DIGITAL HEALTH AND ELECTRONIC HEALTH RECORD SYSTEM
- HIM 1454 - DATA SCIENCE IN HEALTH INFORMATICS
- HIM 1650 - INTRO TO STATISTICS AND RESEARCH DESIGN

Credits: 15

Fall Term-Senior Year

- HIM 1230 - FINANCIAL MANAGEMENT & HEALTH CARE REIMBURSEMENT
- HIM 1410 - HEALTH VOCABULARY, TERMINOLOGY & CLASSIFICATION SYSTEMS
- HIM 1450 - SECURITY, PRIVACY, LEGAL & ETHICAL ISSUES IN HEALTH CARE
- HIM 1453 - DATA ANALYTICS AND MACHINE LEARNING IN HEALTH SCIENCE
- HIM 1485 - PROJECT MANAGEMENT & SYSTEMS ANALYSIS

Credits: 15

Spring Term-Senior Year

- HIM 1231 - TALENT MANAGEMENT AND HUMAN RESOURCES
- HIM 1411 - QUALITY MANAGEMENT
- HIM 1431 - REVENUE CYCLE MANAGEMENT
- HIM 1471 - INTRO TO HEALTHCARE IT AND EMERGING TECHNOLOGIES
- HIM 1495 - CLINICAL INTERNSHIP
- HIM 1651 - CAPSTONE PROJECT

Credits: 18

Total Prerequisite Credits: 60

Total SHRS Credits: 63

Total Credits: 123

***Students take the RHIA Registration Exam**

Note: For part-time and registered health information technician students, HIM Clinical Education HIM 1440, HIM 1460, HIM 1480, and HIM 1495 and HIM 1496 (Capstone Course in HIM) may be taken in any term with permission of advisor and the instructor after the appropriate prerequisite courses have been completed.

The Undergraduate Program in Rehabilitation Science

The Bachelor of Science Program in Rehabilitation Science offers a dynamic curriculum designed to prepare students for graduate education in occupational therapy, physical therapy, physician assistant studies, prosthetics and orthotics, rehabilitation counseling and assistive technology, as well as for graduate studies in other health care fields. In addition to the coursework offered, the program has the flexibility to allow students to pursue their particular interests and goals. Students are encouraged to explore other areas of academic inquiry through elective courses, minors and

certificates throughout the University and abroad; to participate in clinical experiences; to involve themselves in undergraduate research; and to develop their leadership and community building skills through participation in student organizations and community service.

The majority of faculty members who teach in this program are a strong interdisciplinary group of individuals from the School of Health and Rehabilitation Sciences departments, including the departments of Emergency Medicine, Occupational Therapy, Physical Therapy, Physician Assistant Studies, and Rehabilitation Science and Technology. In addition, instructors from other Schools of the Health Sciences (e.g. Nursing, Pharmacy, Public Health) teach within the program along with community leaders, clinicians and researchers with experience in selected areas.

Contact Information:

Amy Evans, MPPM

Academic Advisor and Assistant Director

Undergraduate Program in Rehabilitation Sciences

Suite 5048, Forbes Tower

412-383-6644

undergradrehabscience@shrs.pitt.edu

Major

Rehabilitation Science, BS

The Bachelor of Science Program in Rehabilitation Science (BSRS) offers a dynamic curriculum designed to prepare students for graduate education in occupational therapy, physical therapy, physician assistant studies, prosthetics and orthotics, rehabilitation counseling and assistive technology, in addition to other health care professions. The program has core curriculum requirements with enough flexibility to permit students to pursue their particular interests and goals. Students are encouraged to explore other areas of academic inquiry through elective courses, minors and certificates throughout the University and abroad; to participate in clinical experiences; to involve themselves in undergraduate research; and to develop their leadership skills through participation in student organizations and community service.

Faculty who teach in the BSRS program constitute a strong interdisciplinary group of individuals from the School of Health and Rehabilitation Sciences including representation from the departments of Emergency Medicine, Occupational Therapy, Physical Therapy, Physician Assistant Studies, and Rehabilitation Science and Technology. In addition, instructors from other Schools of the Health Sciences (e.g., Nursing, Pharmacy, Public Health) teach within the program along with community leaders, clinicians and researchers with experience in selected areas.

Contact Information:

Amy Evans, MPPM

Academic Advisor and Assistant Director

Undergraduate Program in Rehabilitation Science

Suite 5048, Forbes Tower

412-383-6644

undergradrehabscience@shrs.pitt.edu

Admission Requirements

Prerequisite Courses:

Students are eligible for admission to the Rehabilitation Science Program after successful completion of 60 college credits including the following prerequisite courses, other admission criteria and an application. Applications will be viewed when approximately 45 credits are completed and 15 credit are in process.

- General Biology (BIOSC 0150 or BIOSC 0715) and Lab (BIOSC 0050 or BIOSC 0057 or BIOSC 0058) - 4 Credits
- General Chemistry and Lab (CHEM 0110 or CHEM 0710) - 4 Credits
- Physics 1 (PHYS 0110 or PHYS 0174 or PHYS 0475) - 3-4 Credits
- Mathematics (MATH 0031 or higher) - 2-3 Credits
  MATH 0032 - TRIGONOMETRY AND FUNCTIONS or higher is highly recommended.
- Statistics (STAT 0200, STAT 1000, or higher) - 3-4 Credits
- Introduction to Psychology (PSY 0010) - 3 Credits
- Human Development - 3 Credits
  REHSCI 1245 - HUMAN DEVELOPMENT or PSYED 0005 - LIFE SPAN DEVELOPMENT preferred; PSY 0310 - DEVELOPMENTAL PSYCHOLOGY accepted
- English Composition (Minimum ENGCMP 0200 or equivalent) - 3 Credits
- Intensive Writing (W) (ENGCMP 0440 recommended) - 3 Credits
- Social Science/Humanities (ANTH 0780 recommended) - 6 Credits

Total Prerequisites: 34-37

Students planning to apply to graduate programs in health sciences are encouraged to complete most of the prerequisite courses for those programs (e.g., Physics 2, Biology 2, Chemistry 2, etc.) prior to admission to the Undergraduate Rehabilitation Science Program. Anatomy and Physiology (prerequisites for many professional health science programs) are included in the Rehabilitation Science curriculum.

Application Procedures

Required for admission: an application with all transcripts from colleges attended, a personal statement, one letter of recommendation, and a resume. A minimum cumulative GPA of 2.75 and a minimum math and science prerequisite GPA of 2.5 is required (3.0 GPA is strongly preferred). Please note that admission to the Rehabilitation Science program is competitive. Meeting the minimum admission criteria does not guarantee admission.

For additional admission criteria, please refer to the SHRS Admissions section of this catalog.

Transfer Student Information:

Transfer students must apply to the University of Pittsburgh by completing the Office of Admission and Financial Aid's Transfer Application and selecting Rehabilitation Science as their intended field of study. International transfer students click here. Application deadline: February 15

Rehabilitation Science Curriculum

While enrolled in the Rehabilitation Science program, students must complete a minimum of 30 credits of SHRS coursework, including the core courses and at least one course from each of the core areas. Students must complete 120 cumulative credits to graduate with the BS in Rehabilitation Science degree.

- *The 30 required SHRS credits include courses from the following departments: ATHLTR, CSD, EM, HIM, HRS, NUTR, and REHSCI.*
- *HRS 1018 Survey of Health and Rehabilitation Professions does not count toward the 30 required SHRS credits for graduation.*

Online Course Policy:

Once a student has matriculated into the BSRS Program, up to 6 online credits will be accepted from either the University of Pittsburgh or another four-year institution. An exception may be made for an online medical terminology course noting that only one credit will be applied towards the BSRS degree. Therefore, a total of 7 online credits may be possible with this scenario. No online courses will be accepted from a two-year institution, other than medical terminology.

Additional online credits may be accepted if taken prior to matriculation into the BSRS Program. Students are expected to review their plan of study with the BSRS Academic Advisor before registering for any online course. All credits from an outside institution must be approved before a student may enroll.

Policy on Taking Courses at Another Institution:

Current SHRS students in good academic standing (cumulative GPA of at least 2.00), including students admitted to SHRS who need to complete prerequisites prior to starting their program, may attend another accredited institution to complete their degree requirements, provided they receive prior approval from the SHRS Dean's office. Students who have completed 60 or more credits may not take program-required courses or electives at two-year institutions. However, up to six credits of graduate school prerequisites may be taken at a two-year institution and be applied to the BSRS degree.

Students will be required to fill out an approval form and provide appropriate course descriptions. Students will not receive credit for courses taken without advance approval. SHRS students may not enroll in courses outside the University of Pittsburgh in the semester they are graduating from SHRS.

Core Curriculum Requirements

- REHSCI 1200 - HUMAN ANATOMY
- REHSCI 1201 - HUMAN ANATOMY LAB
- REHSCI 1225 - INTRO TO REHABILITATION SCIENCE
- REHSCI 1235 - MEDICAL TERMINOLOGY
- REHSCI 1240 - ISSUES IN HEALTH CARE
- REHSCI 1265 - PHARMACOLOGY IN REHABILITATION
- REHSCI 1280 - PSYCH AND SOCLGY OF DISABILITY

Human Physiology (4 credits):

One of the following:

NUR 0012 Human Anatomy and Physiology 1 and NUR 0002 Nursing Anatomy and Physiology Laboratory 1 will no longer be accepted for students entering the program in Fall 2020 and later.

- REHSCI 1205 - HUMAN PHYSIOLOGY
- BIOSC 1070 - HUMAN PHYSIOLOGY-UHC
- BIOSC 1250 - HUMAN PHYSIOLOGY or
- NROSCI 1250 - HUMAN PHYSIOLOGY and
- BIOSC 1255 - PHYSIOLOGY LABORATORY
- NROSCI 1070 - HUMAN PHYSIOLOGY-UHC
  Another approved course

Neuroscience:

One of the following:

- REHSCI 1210 - NEUROSCIENCE
- NROSCI 0080 - BRAIN AND BEHAVIOR
- NROSCI 0083 - UHC BRAIN AND BEHAVIOR
- NROSCI 1000 - INTRO TO NEUROSCIENCE
- NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE
- PSY 0505 - INTRODUCTION TO BIOPSYCHOLOGY

Research Methodology:

One of the following:

- REHSCI 1000 - PRINCIPLES OF RESEARCH METHOLOGY
  strongly recommended
- PSY 0035 - RESEARCH METHODS
- PSY 0036 - RESEARCH METHODS LECTURE
- SOC 0230 - SOCIAL RESEARCH METHODS
  This course will no longer fulfill the requirement for students entering the program in Fall 2020 and later.

Global Citizenship:

One of the following:

- REHSCI 1292 - DIVERSITY AND CULTURAL ISSUES IN HEALTH, DISABILITY AND REHABILITATION
- ANTH 1761 - PATIENTS AND HEALERS: MEDICAL ANTHROPOLOGY 1
- HIST 1090 - HISTORY OF MEDICINE AND HEALTH CARE
- NUR 1829 - CONTEM ISSUES CROSS CULTL HEALTH
- PSY 0186 - CROSS CULTURAL PSYCHOLOGY
- PUBHLT 1001 - INTRODUCTION TO GLOBAL HEALTH
- PUBHLT 1002 - SPECIAL TOPICS IN GLOBAL HEALTH
- SOCWRK 1035 - GLOBAL PERSPECTIVES SOCIAL WORK
- SPAN 1323 - MEDICAL SPANISH
  A Study/Internship abroad with a health, rehabilitation, or disability component, and an academic inquiry into culture may fulfill this requirement. Contact department for additional details and requirements.

Health/Science Writing Intensive:

This requirement will be effective for students entering the program in Fall 2020 and later.

One of the following:

- ENGCMP 0450 - RESEARCH WRITING
- ENGCMP 0530 - WRITING FOR THE SCIENCES
- ENGCMP 0535 - WRITING IN THE HEALTH SCIENCE PROFESSIONS
- ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY
- ENGCMP 1102 - LANGUAGE OF MEDICINE
- ENGCMP 1400 - GRANT WRITING

Additional Rehabilitation Science Elective Courses

- REHSCI 1215 - EXERCISE PHYSIOLOGY
  and
- REHSCI 1216 - EXERCISE PHYSIOLOGY LAB
- REHSCI 1218 - EMERGING BIOMEDICAL TECHNOLOGIES
- REHSCI 1220 - KINESIOLOGY AND BIOMECHANICS
  and
- REHSCI 1221 - KINESIOLOGY AND BIOMECHANICS LAB
- REHSCI 1230 - REHABILITATION ETHICS
- REHSCI 1245 - HUMAN DEVELOPMENT
- REHSCI 1250 - PATHOPHYSIOLOGY/HUMAN DISEASE
- REHSCI 1275 - INTRO TO OCCUPATION SCIENCE
- REHSCI 1285 - INTRO TO EVIDENCED-BASED REHAB
- REHSCI 1290 - PRACTICAL ISSUES IN DISABILITY
- REHSCI 1295 - FIELD EXPERIENCE
- REHSCI 1296 - ASSISTIVE TECHNOLOGY IN REHABILITATION FIELD EXPERIENCE
- REHSCI 1299 - INDEPENDENT STUDY
- HRS 1095 - COMMUNITY CONNECTOR COURSE
- HRS 1515 - REHABILITATION PSYCHOLOGY
- HRS 1701 - INTRODUCTION TO ORTHOTICS AND PROSTHETICS
- HRS 1704 - FUNDAMENTALS OF REHABILITATION ENGINEERING & TECHNOLOGY 1
- HRS 1706 - INTRODUCTION TO REHABILITATION ENGINEERING DESIGNS
- HRS 1718 - PROJECT BASED TECHNOLOGY DESIGN

Example Plan of Study

This plan of study example includes both required and elective courses offered in the Undergraduate Program in Rehabilitation Science. Students are encouraged to design their own plan of study based on their career, academic and personal interests.

Junior Year-Fall Term

- HRS 1701 - INTRODUCTION TO ORTHOTICS AND PROSTHETICS
- REHSCI 1200 - HUMAN ANATOMY
  and
- REHSCI 1201 - HUMAN ANATOMY LAB
- REHSCI 1205 - HUMAN PHYSIOLOGY
- REHSCI 1225 - INTRO TO REHABILITATION SCIENCE
- REHSCI 1235 - MEDICAL TERMINOLOGY
- REHSCI 1240 - ISSUES IN HEALTH CARE

Credits: 15

Junior Year-Spring Term

- Study Abroad - 15 Credits
  or
- REHSCI 1000 - PRINCIPLES OF RESEARCH METHOLOGY
- REHSCI 1220 - KINESIOLOGY AND BIOMECHANICS
  and
- REHSCI 1221 - KINESIOLOGY AND BIOMECHANICS LAB
- REHSCI 1275 - INTRO TO OCCUPATION SCIENCE
- REHSCI 1265 - PHARMACOLOGY IN REHABILITATION
- REHSCI 1292 - DIVERSITY AND CULTURAL ISSUES IN HEALTH, DISABILITY AND REHABILITATION

Credits: 15

Senior Year-Fall Term

- HRS 1704 - FUNDAMENTALS OF REHABILITATION ENGINEERING & TECHNOLOGY 1
- REHSCI 1210 - NEUROSCIENCE
- REHSCI 1215 - EXERCISE PHYSIOLOGY
  and
- REHSCI 1216 - EXERCISE PHYSIOLOGY LAB
- REHSCI 1230 - REHABILITATION ETHICS
- REHSCI 1285 - INTRO TO EVIDENCED-BASED REHAB

Credits: 15

Senior Year-Term 2

- REHSCI 1250 - PATHOPHYSIOLOGY/HUMAN DISEASE
- REHSCI 1280 - PSYCH AND SOCLGY OF DISABILITY
- REHSCI 1295 - FIELD EXPERIENCE
- Electives - 5 Credits

Credits: 15

Certificate

Assistive Technology in Rehabilitation Certificate

Undergraduate Rehabilitation Science Certificates

The Undergraduate Program in Rehabilitation Science offers undergraduate certificates for students planning to continue their education in rehabilitation science programs or those seeking a concentration of courses in a particular rehabilitation science area. These certificates are designed to best prepare students for rehabilitation-related graduate programs; however, the certificates are not a requirement for application.

Completion of the Assistive Technology in Rehabilitation Certificate provides a focused area of study for students interested in careers providing technology to individuals with disabilities. It will prepare students for graduate programs such as prosthetics and orthotics or rehabilitation technology. It will also provide the course work and some of the clinical hours needed to satisfy the requirements for the RESNA (Rehabilitation Engineering and Assistive Technology Society of North America) Assistive Technology Supplier certification.

Requirements

Course requirements are as follows:

- REHSCI 1200 - HUMAN ANATOMY and
- REHSCI 1201 - HUMAN ANATOMY LAB

- REHSCI 1205 - HUMAN PHYSIOLOGY *

- HRS 1701 - INTRODUCTION TO ORTHOTICS AND PROSTHETICS

- HRS 1704 - FUNDAMENTALS OF REHABILITATION ENGINEERING & TECHNOLOGY 1

- HRS 1706 - INTRODUCTION TO REHABILITATION ENGINEERING DESIGNS

- REHSCI 1210 - NEUROSCIENCE or
- NROSCI 0080 - BRAIN AND BEHAVIOR or
- NROSCI 0083 - UHC BRAIN AND BEHAVIOR or
- NROSCI 1000 - INTRO TO NEUROSCIENCE or
- NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE or
- PSY 0505 - INTRODUCTION TO BIOPSYCHOLOGY

- REHSCI 1220 - KINESIOLOGY AND BIOMECHANICS and
- REHSCI 1221 - KINESIOLOGY AND BIOMECHANICS LAB

- REHSCI 1275 - INTRO TO OCCUPATION SCIENCE

- REHSCI 1290 - PRACTICAL ISSUES IN DISABILITY or
- HRS 1017 - INTRODUCTION TO EPIDEMIOLOGY or
- HRS 1515 - REHABILITATION PSYCHOLOGY or
- PSY 0515 - REHABILITATION PSYCHOLOGY or
- IL 1580 - FOUNDATIONS OF SPECIAL EDUC or
- IL 1560 - EARLY EDUCATION OF YOUNG CHILDREN WITH DISABILITIES or
- PSYED 1012 - DEVELOPMENTAL DISABILITIES
- REHSCI 1296 - ASSISTIVE TECHNOLOGY IN REHABILITATION FIELD EXPERIENCE *(3 credits)* **

Total Certificate Credits: 32-33

*Or other approved course

** Or REHSCI 1296 ASSISTIVE TECHNOLOGY IN REHABILITATION FIELD EXPERIENCE (2 cr) and HRS 1718 PROJECT BASED TECHNOLOGY DESIGN

Pathokinesiology in Rehabilitation Certificate

Undergraduate Rehabilitation Science Certificates

The Undergraduate Program in Rehabilitation Science offers undergraduate certificates for students planning to continue their education in rehabilitation science programs or those seeking a concentration of courses in a particular rehabilitation science area. These certificates are designed to best prepare students for rehabilitation-related graduate programs; however, the certificates are not a requirement for application.

Completion of the Pathokinesiology in Rehabilitation Certificate provides the student with an excellent background in the sciences related to normal and pathological motion. It complements coursework offered in graduate programs such as physical therapy, occupational therapy, physician assistant studies, exercise science, kinesiology, and sports medicine. With minimal additional coursework (nutrition and fitness instruction), it also prepares students to take examinations for certification as a personal trainer or fitness expert, such as the Certified Strength and Conditioning Specialist (CSCS®) offered by the National Strength and Conditioning Association.

Requirements

Course requirements are as follows:

- REHSCI 1200 - HUMAN ANATOMY and
- REHSCI 1201 - HUMAN ANATOMY LAB

- REHSCI 1205 - HUMAN PHYSIOLOGY *

- REHSCI 1210 - NEUROSCIENCE

- REHSCI 1215 - EXERCISE PHYSIOLOGY and
- REHSCI 1216 - EXERCISE PHYSIOLOGY LAB

- REHSCI 1220 - KINESIOLOGY AND BIOMECHANICS and
- REHSCI 1221 - KINESIOLOGY AND BIOMECHANICS LAB

- REHSCI 1250 - PATHOPHYSIOLOGY/HUMAN DISEASE

- REHSCI 1285 - INTRO TO EVIDENCED-BASED REHAB

Total Certificate Credits: 25

* Or other approved course

Psycho-Social Issues in Rehabilitation Certificate

Undergraduate Rehabilitation Science Certificates

The Undergraduate Program in Rehabilitation Science offers undergraduate certificates for students planning to continue their education in rehabilitation science programs or those seeking a concentration of courses in a particular rehabilitation science area. These certificates are designed to best prepare students for rehabilitation-related graduate programs; however, the certificates are not a requirement for application.

Completion of the Psycho-Social Issues in Rehabilitation Certificate provides the student with a background in the psychological and social issues involved in disability, rehabilitation, and personal care. It helps prepare students for graduate programs in areas such as occupational therapy, physician assistant studies, rehabilitation counseling, accelerated or direct entry nursing programs, or disability studies.

Requirements

Course requirements are as follows:

- REHSCI 1200 - HUMAN ANATOMY and
- REHSCI 1201 - HUMAN ANATOMY LAB

- REHSCI 1205 - HUMAN PHYSIOLOGY *

- REHSCI 1210 - NEUROSCIENCE or
- NROSCI 0080 - BRAIN AND BEHAVIOR or
- NROSCI 0083 - UHC BRAIN AND BEHAVIOR or
- NROSCI 1000 - INTRO TO NEUROSCIENCE or
- NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE or
- PSY 0505 - INTRODUCTION TO BIOPSYCHOLOGY

- REHSCI 1230 - REHABILITATION ETHICS

- REHSCI 1250 - PATHOPHYSIOLOGY/HUMAN DISEASE

- REHSCI 1275 - INTRO TO OCCUPATION SCIENCE

- HRS 1704 - FUNDAMENTALS OF REHABILITATION ENGINEERING & TECHNOLOGY 1

- REHSCI 1290 - PRACTICAL ISSUES IN DISABILITY or
- HRS 1515 - REHABILITATION PSYCHOLOGY or
- PSY 0515 - REHABILITATION PSYCHOLOGY or
- HRS 1017 - INTRODUCTION TO EPIDEMIOLOGY or
- IL 1580 - FOUNDATIONS OF SPECIAL EDUC or
- IL 1560 - EARLY EDUCATION OF YOUNG CHILDREN WITH DISABILITIES or
- PSYED 1012 - DEVELOPMENTAL DISABILITIES

Total Certificate Credits: 26-27

*Or other approved course

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School of Nursing

The School of Nursing, as an integral part of the University of Pittsburgh, subscribes to the University's commitment to teaching, research, and service. Through these major functions, the school strives to have a positive impact on the quality of health care for all people.

The school offers baccalaureate (BSN), master's (MSN), and doctoral programs in philosophy (PhD) or nursing practice (DNP) that anticipate and reflect health care needs locally, nationally, and internationally. It prepares graduates to function effectively in multifaceted, roles in a variety of settings to promote the health and well-being of people. It strives to instill a spirit of inquiry, encourage academic excellence, and foster lifelong learning in all students. The school seeks to enroll highly qualified students who represent racial, cultural, and geographic diversity and to prepare students for employment in a multicultural society. In keeping with the University's emphasis on excellence in undergraduate education, the school is committed to providing an undergraduate program with a strong clinical focus that builds upon a background in the liberal arts and sciences and provides the foundation for its graduates to become outstanding clinicians.

The knowledge, skill, teaching effectiveness, and diversity of the faculty are important factors in the success of our graduates. The school is committed to fostering excellence in teaching through the faculty's clinical expertise and practice, instructional competency, and development of state-of-the-art knowledge through research. State-of-the-art technology is used to enhance student access and learning. The school supports an environment conducive to research, encourages interdisciplinary collaboration, and seeks to make research an integral part of the learning environment. The success of the school's research agenda continues to determine its national recognition and realm of influence.

The school believes that faculty and students should engage in public, professional, and community services as a way for them to share their knowledge, positively influence patient care delivery, and enhance their own and their peers' professional growth. Such involvement provides leadership for societal change, helps develop effective health care policies, and enhances health care for all people. Service is reflected in leadership and volunteer responsibilities related to the political process, professional organizations, and community service agencies.

Nursing Living Learning Community (LLC)

The Nursing Living Learning Community is an on-campus residency/learning community for nursing students. LLC expresses the School of Nursing's commitment to giving a small campus experience at a large institution. Students are provided with a well-rounded approach to their studies as well as University life, while allowing students to be housed together on one floor, in a group setting. Situated in Lothrop Hall, the LLC is adjacent to the Victoria Building, which houses the School of Nursing. This proximity to the Nursing School provides and added element of convenience for the student. The resident assistant for the LLC is a third or fourth year nursing student who works closely with the faculty and staff in the School of Nursing. One of the goals for the LLC is to provide students with educational experiences that are not normally afforded to incoming first year students. Students who participate in the LLC are given an early opportunity to develop their leadership skills by attending the prestigious Emerging Leaders Program. The LLC also schedules and facilitates study group sessions, nursing presentations, and social gatherings for the nursing residents.

Admission to the LLC is by application only and is limited to students in the traditional undergraduate baccalaureate program.

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- High school graduates
- Students transferring from the regional campuses and other schools of the University of Pittsburgh
- Students transferring from other colleges and universities
- Graduates from a baccalaureate program in any field of study (Accelerated 2nd Degree BSN Program)

All students who wish to obtain a Bachelor of Science in Nursing degree must apply and be accepted into the School of Nursing. Admission to other schools within the university, or to regional campuses does not guarantee admission to the School of Nursing. In general, the student's educational background will determine the most appropriate curriculum plan and program track in which to earn a BSN.

Individual State Boards of Nursing may prohibit a person convicted of any felonious act from licensure as a registered nurse (RN) Prospective students in that situation should contact the Board of Nursing in the state where they plan to practice following graduation.

High School Graduates

Applicants may obtain application information from the Office of Admissions and Financial Aid's Web site: http://www.oafa.pitt.edu/freshadm.aspx. Online application is also available on the OAFA web site

Additional information regarding the application process and eligibility criteria is available on the School of Nursing Web site: http://www.nursing.pitt.edu/degree-programs/undergraduate-bsn-program

All high school applicants must meet the requirements for admission to the University of Pittsburgh as well as those specifically for the School of Nursing. High school courses required of all applicants are:

Course	**Units***
English	4
Mathematics	4
Social Studies	3
Science with a related laboratory or the equivalent (one unit must be in chemistry)	3
Academic Electives**	5
Total	19

*A unit is equivalent to one year of successful completion of acceptable coursework.

**Two units of second language as an elective are highly recommended.

Each high school applicant is required to submit results of the SAT or ACT. The Admissions Office may request additional information, examinations, or measures for determining eligibility.

Students Applying for Transfer from within the University (Internal Transfer)

Students who wish to transfer from schools within the University (College of Arts and Sciences, College of General Studies, and regional campuses) to the undergraduate program in the School of Nursing must consult with their academic advisor to officially initiate the transfer process. All records must be received by the School of Nursing in order for students to be considered for admission. Admission is offered for the Fall and Spring terms. The School of Nursing makes transfer decisions through a competitive process based upon academic eligibility and seating availability. For more information refer to:

http://www.nursing.pitt.edu/admissions/internal-transfer-applicants

Students Applying for Transfer from Other Universities or Colleges (External Transfer)

Applicants who have completed at least 12 credits or one full-time term of study at any institution of higher education other than the University of Pittsburgh will be considered for transfer into the School of Nursing on a competitive basis. Prospective transfer students are required to complete an

online Transfer Application and submit all necessary supporting materials to the Office of Admissions and Financial Aid. For more information refer to: http://www.nursing.pitt.edu/admissions/external-transfer-applicants

Admission to the School of Nursing as a transfer student is contingent upon vacancies in the first year class. Competitive transfer applicants typically have a minimum GPA of 3.5 (on a 4.0 scale) after completion of 24 credits at a college level and B grades or better in science classes and SAT score of 1280 or higher (or an ACT composite score of 27 or higher). However, exceptions may be considered based upon the qualifications of the applicant. Applicants will be evaluated on their academic performance in both high school and a college or university. The following points govern the allowable advanced-standing credits:

- Official transcripts of courses taken at other universities or colleges must be submitted.
- Course descriptions for each course must be submitted to be considered for advanced-standing credits.
- Course content must be comparable to that offered at the University of Pittsburgh.
- The credit transferred for any course can be no greater than the credit given at the University of Pittsburgh.
- Only courses with letter grades of B or better are transferable.
- Credit for service, correspondence, or extension courses is not transferable.
- Science courses must have been completed within the past eight years. The Associate Dean for Student Affairs and Alumni Relations (or designee) must approve any exception to the eight-year guideline.

Readmission

Unless there are special circumstances on record in the school, a student who has attended a different university/college while not attending the University of Pittsburgh is required to reapply through the University Office of Admissions and Financial Aid (OAFA). Readmission will be contingent upon a vacancy in the class to which the student is to be readmitted. The start of the program of studies will be based on courses completed, current curriculum, and placement considerations.

Admission of Students from Other Countries

International applicants for the four-year undergraduate BSN should apply using the International Student Undergraduate Application. For more information go to the International Student Admissions Web site: http://www.oafa.pitt.edu/intladm.aspx.

RN Options and Accelerated 2nd Degree BSN International applicants should apply directly to the School of Nursing: https://app.applyyourself.com/?id=up-nurs

Applicants are required to submit official, original academic credentials in certified English translation. The application process should be started 9 to 12 months in advance of the intended enrollment date.

An applicant whose native language is not English must take the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or Duolingo English Test (DET) and submit official test results. Applicants must have a level of English proficiency reflected by a score of at least 213 or greater (computer-based test), or 550 or greater (paper-based test), or 100 or greater (Internet-based test). The school will accept official scores from International English Language Testing Systems (IELTS) for a minimum test band score of 6.5 taking the academic writing and reading modules of the test). Applicants seeking fall term admission must take the TOEFL/IELTS or Duolingo no later than the preceding March. The Institutional code for the University of Pittsburgh is **2927 and the School of Nursing Code is 43.**. See the International Student Admissions section of this bulletin for more information on the TOEFL/IETS/or Duolingo. Subject-specific international academic credential evaluation of official college transcript is required. For more information refer to: http://www.oafa.pitt.edu/intladm.aspx.

RN Options Applicants

RN-BSN (Online Offering)
RN - MSN (Online Offering in Informatics and Clinical Nurse Leader- CNL)
RN- DNP (Onsite offering ONLY)

The University of Pittsburgh RN Options (BSN or early Admission to MSN or DNP) curriculum is designed for registered nurses, who obtained their initial nursing education through either a CCNE, ACICS or ACEN [NLN] accredited diploma or associate degree or diploma program and want to pursue undergraduate education with early admission to graduate nursing program. Courses are taught by nursing leaders who are experts in their field. Faculty serve as educators, role models and mentors for their students. The RN Options curriculum builds upon the individual professional nurse's strengths and experiences to expand professional knowledge and practice skills. Graduates of the University of Pittsburgh School of Nursing possess critical appraisal/thinking skills, sophisticated clinical practice knowledge, and the ability to integrate the latest research findings to provide quality, safe and effective patient care.

Registered nurses who are interested in pursuing a Bachelor's Degree only or Early Admission to the MSN or DNP track applicants should apply online directly to the School of Nursing at: http://app.applyyourself.com/?id=up-nurs

Course offerings are flexible and students may begin coursework in any term (fall/spring/summer).

The RN-BSN and RN-MSN is now offered in an online format with following exception: Neonatal Nurse Practitioner (NP) Area of Concentration (AOC). The DNP program will only be offered in an onsite format.

Application Guidelines

Applications are reviewed on a rolling basis. Applicants must submit evidence of previous education and other required documents as listed below.

For RN-BSN:

- Successful completion of a nursing diploma or associate degree program by submitting official Transcripts from institution.
- Cumulative Grade Point Average (GPA) of 3.0 for previous college and/or coursework, which must be semester credits or the equivalent.
- Copy of current RN license (students may be permitted to take theory courses only until evidence of successful completion of NCLEX is provided) (All students must obtain a Pennsylvania license)
- Successful completion of all prerequisite courses
- Brief type written essay
- Current resume
- Three letters of professional recommendation
- Completed online application
- International applicants: consult nursing.pitt.edu & ois.pitt.edu
- Formal interview.

For the RN-MSN or DNP early admission track:

- Successful completion of a nursing diploma or associate degree program by submitting official Transcripts from institution.
- Cumulative Grade Point Average (GPA) of 3.0 for previous college and/or coursework, which must be semester credits or the equivalent.
- Copy of current RN license (All students must obtain a Pennsylvania license) (students may be permitted to take theory courses only until evidence of successful completion of NCLEX is provided)
- Successful completion of all prerequisite courses
- ≥ 3.0 GPA in Associate Degree or nursing diploma (from ACEN (NLN), ACICS, or CCNE accredited program)
- Graduate Record Exam (GRE) :
  - MSN track - may be waived if the RN program GPA is 3.5 or higher;
  - or DNP track - no waiver, Verbal & Quantitative sections (competitive score), Analytical Writing (≥ 3)
- Brief type written essay (include DNP project statement as needed)
- Current resume
- Three letters of professional recommendation, one from current manger
- Completed online application
- International applicants: consult nursing.pitt.edu & ois.pitt.edu
- Formal interview*

RN-MSN or RN-DNP option applicants must meet the admission criteria for the BSN Program and simultaneous conditional admission to the preferred graduate program. While in RN-MSN or RN - DNP, students receive a BSN degree and continue with the graduate program. Twenty-four (24 cr.) bridge credits are counted in BSN requirement as well as graduate level curriculum. Full and part-time schedules are available. Potential students will meet with the RN Options Coordinator for an interview and must meet with the coordinator of the graduate program.

Accelerated 2nd Degree BSN Program Applicants

The Accelerated 2nd Degree BSN is designed to enable individuals with a Baccalaureate Degree in another discipline the ability to earn a Bachelor's of Science Degree in Nursing (BSN) in three consecutive full-time terms. The Accelerated 2nd Degree BSN requires 122 credits: 31 credits from a previous degree, 36 to 38 prerequisite credits, and 54 curriculum credits. The curriculum is fast-paced and designed to build upon the individual's previous education while providing additional science and nursing content. At the completion, graduates are eligible to take the National Council Licensure Examination (NCLEX) to become Registered Nurses (RN).

Admission to the Accelerated 2nd Degree BSN is competitive and is based upon proven academic achievement and grades earned in prerequisite courses. The school admits three cohorts, Fall, Spring and Summer.

The Accelerated 2nd Degree BSN requires an applicant to complete 36 prerequisite credits. These courses may be taken at any college or university. Courses from other institutions must be evaluated as equivalent to University of Pittsburgh courses. (Coursework taken at the University of Pittsburgh School of Nursing prior to admission may be taken as a non-degree seeking student.)

Required prerequisites include:

Course	**Credits**
General & Bio-Organic Chemistry*+ *(includes a lab)*	4
English Composition (scientific/technical)	3
Directed Elective	3
Psychology	3
Sociology	3
Statistics *(descriptive, probability, & inferential)*	3
Human Anatomy & Physiology *+ *(includes a lab)*	6-8
Human Genetics *+	3
Microbiology *+ *(includes a lab)*	4
Pathophysiology	4

**Should have been completed within the past ten years*

+Should have achieved a grade of "B-" or better

Early submission of an application is recommended. New classes begin in the Fall, Spring and Summer term. Accelerated 2nd Degree BSN applications are reviewed, and admission decisions are made on a rolling basis. Preferred application deadlines are Fall Term--February 15; Spring Term--June 1; and Summer Term--October 1. Application information and other materials are located on the web at accelerated 2nd degree admissions. Prospective students must apply online to the School of Nursing at http://app.applyyourself.com/?id=up-nurs.

Application items include:

1. Completed online application
2. Official transcripts of all course work taken at any university or college
3. Two (2) letters of professional recommendation (via online application or mailed in signed, sealed envelopes)
4. Resume
5. Personal essay explaining how this program will help achieve professional goals
6. Application fee (non-refundable and does not apply to payment of tuition)
7. INTERNATIONAL APPLICANTS: (in addition to above items)
    - Official graduation certificate verifying degree obtained (English translation)
    - Subject-specific international academic credential evaluation of official college transcript
    - Official TOEFL/IELTS or Duolingo score - exempt if native language is English or graduate of a degree program at an accredited institution in the United States

NOTE: All official documentation must be submitted in sealed envelopes from the originating institutions to the School of Nursing (3500 Victoria Street, 240 Victoria Building, Pittsburgh, PA 15261).

Provisional admission may be granted after completion of 6 credits of science prerequisites if all other admission requirements are met. Undergraduate applicants who are within 12-18 credits of graduation will be considered for provisional admission. All prerequisite courses must be completed and official transcripts received by the start of the first term. All admitted students will be required to place a $250 as non-refundable deposit upon acceptance of admission, which will be count towards tuition in the first term of study.

Complete applications will be reviewed without Official GRE scores. If admitted, the school will provide a voucher or reimburse (if taken prior to admission) the fees for the GRE after your deposit is received. The GRE must be completed prior to start of the program.

Academic Standards

Students have the obligation to exhibit honesty and to respect the ethical standards of the nursing profession in carrying out their academic assignments. The academic standards of the school are:

- A student may be placed on probation or dismissed for illegal, unsafe, or unethical professional conduct.
- Students must maintain a cumulative GPA of 2.00 or better throughout the program.
- Students must fulfill the requirements for the baccalaureate degree within a period of eight years.

Students should view the School of Nursing Web site's Student Affairs and Alumni Relations web page http://www.nursing.pitt.edu/resources-students/policies for current policies.

Academic Advising

For students in the traditional BSN undergraduate track, the academic advisement process begins during the University first year orientation program (Online Orientation), at which time students meet with an academic advisor. Students maintain the same advisor throughout the program of study, and continue to meet on a regular basis. This continuity permits advisors to promote academic achievements by guiding students through each level in the program, assisting in career planning and preparation, and by serving as primary educational resource, facilitator and student advocate.

Preclinical Requisites

Clinicals begin in the 2nd year of the program. Before beginning each school year, it is mandatory that students meet the following requirements for clinical experience (the frequency of these requirements vary by clinical site):

- HIPAA module (completed during the Spring Term of the first year for traditional licensure)
- The American Heart Association (AHA)--BLS- Healthcare Provider Course Certification
- Personal health insurance coverage
- ACT 33/34 clearances (child abuse/criminal record check)
- ACT 73 FBI fingerprinting background check
- ACT 168 Pennsylvania Sexual Misconduct/Abuse Disclosure Release (for fourth year students)
- Initial Health and Annual Health forms are uploaded in Project Concert.

Directed Electives

- AFRCNA 0311 - INTRODUCTION TO THE AFRICAN AMERICAN FAMILY
- AFRCNA 1710 - AFRICAN AMERICAN HEALTH ISSUES
- ANTH 0538 - THE ARCHEOLOGIST LOOKS AT DEATH
- ANTH 0620 - BIOCULTURAL ANTHROPOLOGY
- ANTH 0768 - HUMAN SEXUALITY IN CROSS CULTURE
- ANTH 1713 - HEALTH, NUTRITION, AND POPULATION 1
- ANTH 1797 - MOUNTAINS AND MEDICAL SYSTEMS
- ASL 0101 - AMERICAN SIGN LANGUAGE 1
- ASL 0102 - AMERICAN SIGN LANGUAGE 2
- ASL 0103 - AMERICAN SIGN LANGUAGE 3
- ASL 0104 - AMERICAN SIGN LANGUAGE 4
- ASL 1625 - THE DEAF AND SOCIETY
- BUSERV 1910 - INTRODUCTION TO BUSINESS
- COMMRC 0500 - ARGUMENT
- COMMRC 0530 - INTERPERSONAL COMMUNICATION
- ECON 0200 - GAME THEORY PRINCIPLES
- ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION
- EM 1102 - EMERGENCY MEDICINE TECHNICIAN
- GSWS 0100 - INTRODUCTION TO GENDER, SEXUALITY, AND WOMEN'S STUDIES
- GSWS 0100 - INTRODUCTION TO GENDER, SEXUALITY, AND WOMEN'S STUDIES

- GSWS 0500 - INTRODUCTION TO FEMINIST THEORY
- GSWS 0550 - SEX AND SEXUALITIES
- GSWS 1170 - QUEER THEORY
- GSWS 1180 - POLITICS OF GENDER AND FOOD
- GSWS 1190 - MASCULINITIES
- GSWS 1200 - TRANSGENDER STUDIES
- HIST 1010 MAGIC, MEDICINE, AND SCIENCE
- HIST 1190 - MEDIEVAL GOVERNMENT AND SOCIETY
- HPS 0427 - MYTH AND SCIENCE
- HPS 0515 - MAGIC, MEDICINE AND SCIENCE
- HPS 0611 - PRINCIPLES OF SCIENTIFIC REASONING
- HPS 0613 - MORALITY AND MEDICINE
- HPS 0620 - SCIENCE AND RELIGION
- HPS 1623 - DEATH AND HEALTHCARE PROFESSIONS
- HPS 1625 - PHILOSOPHY OF MEDICINE
- NROSCI 0080 - BRAIN AND BEHAVIOR
- NROSCI 0081 - DRUGS AND BEHAVIOR
- NUR 1136 - HIMALAYAN WILDERNESS FIRST RESPONDER
- NUR 1136 - HIMALAYAN WILDERNESS FIRST RESPONDER
- LEGLST 1230 - PSYCHOLOGY AND LAW
- LEGLST 1315 - SEX, LAW AND MARRIAGE
- LEGLST 1318 - SEPARATION, DIVORCE AND CUSTODY
- LING 1235 - LANGUAGE, GENDER AND SEXUALITY
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- PHIL 1840 - SCIENCE AND RELIGION
- PS 1262 - HEALTH POLICY IN UNITED STATES
- PSY 0105 - INTRODUCTION TO SOCIAL PSYCHOLOGY
- PSY 0160 - PSYCHOLOGY OF PERSONALITY
- PSY 0184 - PSYCHOLOGY OF GENDER
- PSY 0186 - CROSS CULTURAL PSYCHOLOGY
- PSY 0205 - PSYCHOPATHOLOGY
- PSY 0310 - DEVELOPMENTAL PSYCHOLOGY
- PSY 0505 - INTRODUCTION TO BIOPSYCHOLOGY
- PSY 1205 - ABNORMAL PSYCHOLOGY
- PSY 1215 - HEALTH PSYCHOLOGY
- PSY 1230 - PSYCHOLOGY OF DEATH AND DYING
- PSY 1255 - PRINCIPLES OF BEHAVIOR MODIFICATION
- PSY 1315 - DEVELOPMENTAL PSYCH: INFANCY
- PSY 1355 - ADOLESCENCE
- PSY 1471 - MAPPING HUMAN BRAIN CONNECTIVITY TECHNOLOGY BASIC RESEARCH AND CLINICAL APPLICATIONS
- PSY 2576 Topics Seminar in Health Psychology - Graduate Course- Department consent required
- PUBHLT 1001 - INTRODUCTION TO GLOBAL HEALTH
- REHSCI 1240 - ISSUES IN HEALTH CARE
- REHSCI 1245 - HUMAN DEVELOPMENT
- RELGST 1405 - RELIGION AND SEXUALITY
- RELGST 1552 - BUDDHIST MEDITATIVE TRADITIONS
- RELGST 1558 - BUDDHISM AND PSYCHOLOGY
- RELGST 1725 - DEATH AND HEALTHCARE PROFESSIONS
- RELGST 0760 - RELIGION AND RATIONALITY
- RELGST 0770 - SCIENCE AND RELIGION
- SOC 0007 - SOCIAL PROBLEMS
- SOC 0317 - GLOBALIZATION
- SOC 0438 - SOCIOLOGY OF THE FAMILY
- SOC 0446 - SOCIOLOGY OF GENDER
- SOC 0460 - RACE AND ETHNICITY
- SOC 0473 - SOCIOLOGY OF GLOBALIZATION AND HEALTH
- SOC 0477 - MEDICAL SOCIOLOGY

- SOC 1413 - MARRIAGE
- SOC 1448 - WORKING WOMEN
- SOC 1450 - HEALTH AND ILLNESS
- SOC 1488 - HISTORY MEDICINE AND HEALTH CARE
- SOC 1515 - SPECIAL TOPICS STUDY ABROAD
- SOCWRK 1000 - INTRODUCTION TO SOCIAL WORK
- SOCWRK 1005 - FOUNDATIONS OF THE WELFARE STATE
- SPAN 1323 - MEDICAL SPANISH
- SPAN 1439 - QUEER MEXICO

School of Nursing Faculty

School of Nursing Faculty

Program and Course Offerings

Major

Nursing, BSN Curriculum, Class of 2019 and 2020

Degree Requirements

To earn the degree of Bachelor of Science in Nursing, the student must demonstrate satisfactory academic achievement in required course work prescribed by the curriculum with an overall academic achievement of a minimum GPA of 2.00. All pre-licensure undergraduate students will be required to successfully complete and pass standardized tests throughout the curriculum in order to progress through and graduate from the program. The degree requires a minimum of 124 credits. (Refer to curriculum design at www.nursing.pitt.edu for specific degree requirements.)

Upon completion of the undergraduate program, nursing students receive a Bachelor of Science in Nursing, which is considered the first professional nursing degree. They are then eligible to take the National Council Licensure Examination (NCLEX) to become Register Nurses (RN).

Special Academic Opportunities/Programs

Students in the nursing program begin clinical experience during the first semester of the sophomore year and continue to have complex, rigorous, and unique experiences throughout the junior and senior years. During the senior year students identify an area of clinical interest and complete an extensive internship under the direction of a nurse preceptor.

Many opportunities are available for nursing students including independent study with advanced practice nurses and/or nurse researchers, research projects, and volunteer activities. All students are members of the Nursing Student Association (NSA) and are encouraged to participate in local, state, and national activities. Group tutoring and special review sessions for chemistry, microbiology, anatomy, and physiology are available for all nursing students. Students may also pursue a variety of other academic opportunities available throughout the university, such as participation in Honors College and other optional undergraduate activities and programs.

Total Credits: 124-126

Year 1

Fall Term

- CHEM 0910 - CHEMICAL PRINCPL HEALTH PROFESSN
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1
- NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1
- English Composition 3 cr.

- Psychology 3 cr. +
- Art, Music, Creative Expression or Literature 3 cr.
- NUR 0001 - FIRST YEAR SEMINAR

Total: 17

Spring Term

- NUR 0031 - MICROBIOLOGY
- NUR 0032 - MICROBIOLOGY LABORATORY
- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2
- NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2
- NUR 0051 - INTRODUCTION TO PROFESSIONAL NURSING
- NUR 0086 - NURSING INFORMATICS
- NUR 0088 - INTRODUCTION TO BASIC STATISTICS FOR EVIDENCE-BASED PRACTICE

Total: 16

Year 2

Fall Term

- NUR 0020 - PATHOPHYSIOLOGIC FOUNDATIONS OF NURSING CARE
- NUR 0080 - FOUNDATIONS OF NURSING PRACTICE 1
- NUR 0080C - FOUNDATIONS OF NURSING PRACTICE 1 CLINICAL
- NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN
- NUR 1680 - INTRODUCTION TO GENETICS AND MOLECULAR THERAPEUTICS

Total: 15

Spring Term

- NUR 0081 - FOUNDATIONS OF NURSING PRACTICE 2
- NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS
- NUR 0082C - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL
- NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE
- Sociology 3 cr.
- NUR 0066 - NUTRITION FOR CLINICAL PRACTICE

Total: 18

Year 3

Fall Term

- NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES *
- NUR 1050C - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL *
- NUR 1052 - NURSING CARE OF CHILDREN AND THEIR FAMILIES *
- NUR 1052C - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL *
- Anthropology/Culture: American or Foreign 3 cr.
- NUR 1085 - ETHICS IN NURSING AND HEALTH CARE

Total: 16

Spring Term

- NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS *
- NUR 1060C - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL *
- NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS *
- NUR 1120C - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL *
- NUR 1054 - NURSING CARE OF OLDER ADULTS *
- NUR 1054C - NURSING CARE OF OLDER ADULTS CLINICAL *
- Commrc 0520 Public Speaking 3 cr.

Total: 16

Year 4

Fall Term

- NUR 1128 - COMMUNITY HEALTH NURSING **
- NUR 1128C - COMMUNITY HEALTH NURSING CLINICAL **
- NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING **
- NUR 1121C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL **
- Senior Special Topics Elective 2-3 cr. **

Total: 12-13

Spring Term

- NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE **
- NUR 1134C - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL **
- Directed Electives - 3 cr.
- NUR 1990 - SENIOR SEMINAR
- Elective 2-3 cr.
- A series of Kaplan Preparation Practice Tests are integrated throughout the nursing program. A Diagnostic Prep, a Predictor exam, and a 3 day Kaplan Review are scheduled at end of program to provide students with prep resources to take the National Nursing License.

Total: 14-15

Note:

+ Must be taken prior to NUR 1060

++ Must be taken prior to NUR 1054

* Placement varies in the junior year

** Placement varies in the senior year

Nursing, BSN Curriculum, Class of 2021

(Revised 2017 to reduce clinical hours throughout program - Class of 2021)

TOTAL CREDITS: 124-125

Degree Requirements

To earn the degree of Bachelor of Science in Nursing, the student must demonstrate satisfactory academic achievement in required course work prescribed by the curriculum with an overall academic achievement of a minimum GPA of 2.00. All pre-licensure undergraduate students will be required to successfully complete and pass standardized tests throughout the curriculum in order to progress through and graduate from the program. The degree requires a minimum of 124 credits. (Refer to curriculum design at www.nursing.pitt.edu for specific degree requirements.)

Upon completion of the undergraduate program, nursing students receive a Bachelor of Science in Nursing, which is considered the first professional nursing degree. They are then eligible to take the National Council Licensure Examination (NCLEX) to become Register Nurses (RN).

Special Academic Opportunities/Programs

Students in the nursing program begin clinical experience during the first semester of the sophomore year and continue to have complex, rigorous, and unique experiences throughout the junior and senior years. During the senior year students identify an area of clinical interest and complete an extensive internship under the direction of a nurse preceptor.

Many opportunities are available for nursing students including independent study with advanced practice nurses and/or nurse researchers, research projects, and volunteer activities. All students are members of the Nursing Student Association (NSA) and are encouraged to participate in local, state, and national activities. Group tutoring and special review sessions for chemistry, microbiology, anatomy, and physiology are available for all nursing students. Students may also pursue a variety of other academic opportunities available throughout the university, such as participation in Honors College and other optional undergraduate activities and programs.

Freshman

Fall (17 cr.)

- CHEM 0910 - CHEMICAL PRINCPL HEALTH PROFESSN
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1
- NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1
- English Composition - 3 cr.
- Psychology - 3 cr.
- Art, Music, Creative Expression or Literature - 3 cr.
- NUR 0001 - FIRST YEAR SEMINAR

Spring (16 cr.)

- NUR 0031 - MICROBIOLOGY
- NUR 0032 - MICROBIOLOGY LABORATORY
- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2
- NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2
- NUR 0088 - INTRODUCTION TO BASIC STATISTICS FOR EVIDENCE-BASED PRACTICE
- NUR 0051 - INTRODUCTION TO PROFESSIONAL NURSING
- NUR 0086 - NURSING INFORMATICS

Sophomore

Fall (17.5 cr.)

- NUR 0020 - PATHOPHYSIOLOGIC FOUNDATIONS OF NURSING CARE
- NUR 0080 - FOUNDATIONS OF NURSING PRACTICE 1
- NUR 0090 - FOUNDATIONS OF NURSING PRACTICE 1 CLINICAL
- NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN
- NUR 1680 - INTRODUCTION TO GENETICS AND MOLECULAR THERAPEUTICS
- Elective - 3 cr.

Spring (17.5 cr.)

- NUR 0081 - FOUNDATIONS OF NURSING PRACTICE 2
- NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS
- NUR 0092 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL
- NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE
- Sociology - 3 cr.
- NUR 0066 - NUTRITION FOR CLINICAL PRACTICE

Junior

Fall (15 cr.)

- NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES
- NUR 1057 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL
- NUR 1052 - NURSING CARE OF CHILDREN AND THEIR FAMILIES
- NUR 1042 - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL
- Anthropology/Culture: American or Foreign - 3 cr.
- NUR 1085 - ETHICS IN NURSING AND HEALTH CARE

Spring (14 cr.)

- NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS
- NUR 1066 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL
- NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS
- NUR 1020 - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL
- NUR 1054 - NURSING CARE OF OLDER ADULTS
- COMMRC 0520 - PUBLIC SPEAKING

Senior

Fall (13.5-14.5 cr.)

- NUR 1128 - COMMUNITY HEALTH NURSING
- NUR 1138 - COMMUNITY HEALTH NURSING CLINICAL
- NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING
- NUR 1121C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL
- Senior Special Topics Electives - 4 - 5 cr.

Spring (13.5-14.5 cr.)

- NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE
- NUR 1135 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL
- Directed Electives - 3 cr.
- NUR 1990 - SENIOR SEMINAR
- Electives - 3-4 cr.
- A series of Kaplan Preparation Practice Tests are integrated throughout the nursing program. A Diagnostic Prep, a Predictor exam, and a 3 day Kaplan Review are scheduled at end of program to provide students with prep resources to take the National Nursing License.

Nursing, BSN Curriculum, Class of 2022 and 2023

On 9/23/2020 the name of the program was updated in the published catalog. In an effort to provide accurate information the update was made on 9/23/2020.

Degree Requirements

To earn the degree of Bachelor of Science in Nursing, the student must demonstrate satisfactory academic achievement in required course work prescribed by the curriculum with an overall academic achievement of a minimum GPA of 2.00. All pre-licensure undergraduate students will be required to successfully complete and pass standardized tests throughout the curriculum in order to progress through and graduate from the program. The degree requires a minimum of 124 credits. (Refer to curriculum design at www.nursing.pitt.edu for specific degree requirements.)

Upon completion of the undergraduate program, nursing students receive a Bachelor of Science in Nursing, which is considered the first professional nursing degree. They are then eligible to take the National Council Licensure Examination (NCLEX) to become Register Nurses (RN).

Special Academic Opportunities/Programs

Students in the nursing program begin clinical experience during the first semester of the sophomore year and continue to have complex, rigorous, and unique experiences throughout the junior and senior years. During the senior year students identify an area of clinical interest and complete an extensive internship under the direction of a nurse preceptor.

Many opportunities are available for nursing students including independent study with advanced practice nurses and/or nurse researchers, research projects, and volunteer activities. All students are members of the Nursing Student Association (NSA) and are encouraged to participate in local, state, and national activities. Group tutoring and special review sessions for chemistry, microbiology, anatomy, and physiology are available for all nursing students. Students may also pursue a variety of other academic opportunities available throughout the university, such as participation in Honors College and other optional undergraduate activities and programs.

Freshman

Fall (18 cr.)

- CHEM 0910 - CHEMICAL PRINCPL HEALTH PROFESSN
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1
- NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1
- English Composition 3.0
- Psychology+ 3.0
- Art, Music, Creative Expression or Literature 3.0
- NUR 0001 - FIRST YEAR SEMINAR

Spring (17 cr.)

- NUR 0031 - MICROBIOLOGY
- NUR 0032 - MICROBIOLOGY LABORATORY
- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2
- NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2
- NUR 0088 - INTRODUCTION TO BASIC STATISTICS FOR EVIDENCE-BASED PRACTICE
- NUR 0051 - INTRODUCTION TO PROFESSIONAL NURSING
- NUR 0053 - INTRODUCTION TO INCLUSION, EQUITY, AND DIVERSITY IN HEALTH CARE
- Elective 2 cr.

Sophomore

Fall (16.5 cr.)

- NUR 0020 - PATHOPHYSIOLOGIC FOUNDATIONS OF NURSING CARE
- NUR 0080 - FOUNDATIONS OF NURSING PRACTICE 1
- NUR 0090 - FOUNDATIONS OF NURSING PRACTICE 1 CLINICAL
- NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN
- NUR 1680 - INTRODUCTION TO GENETICS AND MOLECULAR THERAPEUTICS
- NUR 0086 - NURSING INFORMATICS

Spring (17.5 cr.)

- NUR 0081 - FOUNDATIONS OF NURSING PRACTICE 2

- NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS
- NUR 0092 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL
- NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE
- Sociology
- NUR 0066 - NUTRITION FOR CLINICAL PRACTICE

Junior

Fall (15 cr.)

- NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES
- NUR 1052 - NURSING CARE OF CHILDREN AND THEIR FAMILIES
- NUR 1057 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL
- NUR 1042 - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL
- Anthropology/Culture: American or Foreign
- NUR 1085 - ETHICS IN NURSING AND HEALTH CARE

Spring (14 cr.)

- NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS
- NUR 1066 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL
- NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS
- NUR 1020 - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL
- NUR 1054 - NURSING CARE OF OLDER ADULTS
- COMMRC 0520 - PUBLIC SPEAKING

Senior

Fall (12.5-13.5 cr.)

- NUR 1128 - COMMUNITY HEALTH NURSING
- NUR 1138 - COMMUNITY HEALTH NURSING CLINICAL
- NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING
- NUR 1121C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL
- Senior Special Topics Elective 3.0-4.0

Spring (13.5-14.5 cr.)

- NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE
- NUR 1135 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL
- Directed Electives 3.0
- NUR 1990 - SENIOR SEMINAR
- Elective 3.0-4.0
- A series of Kaplan Preparation Practice Tests are integrated throughout the nursing program. A Diagnostic Prep, a Predictor exam, and a 3 day Kaplan Reviews are scheduled at end of program to provide students with prep resources to take the National Nursing License.

Total Credits: 124-126

Nursing, BSN Curriculum, Class of 2024

**On 9/23/2020 this program was approved to be added to the published catalog. In order to maintain accurate information this was updated on 9/23/2020.*

Freshman

Fall (18 cr.)

- CHEM 0910 - CHEMICAL PRINCPL HEALTH PROFESSN
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1
- NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1
- NUR 0051 - INTRODUCTION TO PROFESSIONAL NURSING
- NUR 0001 - FIRST YEAR SEMINAR
- Psychology (3 cr.)
- English Composition (3 cr.)

Spring (18 cr.)

- NUR 0031 - MICROBIOLOGY
- NUR 0032 - MICROBIOLOGY LABORATORY

- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2
- NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2
- NUR 0088 - INTRODUCTION TO BASIC STATISTICS FOR EVIDENCE-BASED PRACTICE
- NUR 0053 - INTRODUCTION TO INCLUSION, EQUITY, AND DIVERSITY IN HEALTH CARE
- A Liberal Arts Requirement (3 cr.)
- Elective (3 cr.)

Sophomore

Fall (16.5 cr.)

- NUR 0020 - PATHOPHYSIOLOGIC FOUNDATIONS OF NURSING CARE
- NUR 0080 - FOUNDATIONS OF NURSING PRACTICE 1
- NUR 0090 - FOUNDATIONS OF NURSING PRACTICE 1 CLINICAL
- NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN
- NUR 1680 - INTRODUCTION TO GENETICS AND MOLECULAR THERAPEUTICS
- NUR 0086 - NURSING INFORMATICS

Spring (17.5 cr.)

- NUR 0081 - FOUNDATIONS OF NURSING PRACTICE 2
- NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS
- NUR 0092 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL
- NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE
- NUR 0066 - NUTRITION FOR CLINICAL PRACTICE
- A Liberal Arts Requirement

Junior

Fall (15 cr.)

- NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES
- NUR 1057 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL
- NUR 1052 - NURSING CARE OF CHILDREN AND THEIR FAMILIES
- NUR 1042 - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL
- NUR 1085 - ETHICS IN NURSING AND HEALTH CARE
- A Liberal Arts Requirement

Spring (14 cr.)

- NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS

- NUR 1066 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL
- NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS
- NUR 1020 - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL
- NUR 1054 - NURSING CARE OF OLDER ADULTS
- COMMRC 0520 - PUBLIC SPEAKING

Senior

Fall (13 - 14 cr.)

- NUR 1128 - COMMUNITY HEALTH NURSING
- NUR 1138 - COMMUNITY HEALTH NURSING CLINICAL
- NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING
- NUR 1121C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL
- NUR 1212 - INTRODUCTION TO HEALTHCARE FINANCE AND POLICY
- Senior Special Topic (3-4 cr.)

Spring (13 - 14 cr.)

- NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE
- NUR 1135 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL
- NUR 1990 - SENIOR SEMINAR
- Elective (2.5 cr.)
- Directed Elective (3 cr.)

Take 2 Graduate Courses Senior Year Last Term

- NUR 2004 - PATHPHYLGY ACROSS LIFE SPAN
- NUR 2010 - HEALTH PROMO/DISEASE PRVNTN
- NUR 2011 - APPLIED STATISTICS FOR EBP
- NUR 2061 - ORGANIZTNL & MANAGEMENT THEORY

Enter Graduate Program pending NCLEX & Graduation from BSN

TOTAL CREDITS: 124-126

Track

Nursing - Accelerated 2nd Degree, BSN

Accelerated 2nd Degree BSN Curriculum

Term 1

- NUR 1281 - FOUNDATIONS OF NURSING PRACTICE 1
- NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS
- NUR 1282C - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL
- NUR 2000 - RESEARCH FOR EVIDENCE-BASED PRACTICE 1
- NUR 0066 - NUTRITION FOR CLINICAL PRACTICE
- NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN

Total Credits: 18

Term 2

- NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS
- NUR 1020 - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL
- NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS
- NUR 1260C - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL
- NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES
- NUR 1250C - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL
- NUR 1052 - NURSING CARE OF CHILDREN AND THEIR FAMILIES
- NUR 1252C - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL
- NUR 1054 - NURSING CARE OF OLDER ADULTS
- NUR 1212 - INTRODUCTION TO HEALTHCARE FINANCE AND POLICY

Total Credits: 18

Term 3

- NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING
- NUR 1221C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL
- NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE
- NUR 1234C - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL
- NUR 1128 - COMMUNITY HEALTH NURSING
- NUR 1228C - COMMUNITY HEALTH NURSING CLINICAL
- NUR 1085 - ETHICS IN NURSING AND HEALTH CARE
- NUR 0086 - NURSING INFORMATICS
- NUR 1990 - SENIOR SEMINAR

Total Credits: 18

Note:

A series of Kaplan Preparation Practice Tests are integrated throughout the nursing program. A Diagnostic Prep, a Predictor exam, and a 3 day Kaplan Review are scheduled at end of program to provide students with prep resources to take the National Nursing License.

Nursing - RN Options - Early Admission to MSN or DNP

RN Options General Education courses

Prerequisites:

(U.S. institution courses-evaluated for equivalency to University of Pittsburgh courses)

- Anthropology 3 cr.
- English Composition 3 cr.
- CHEM 0910 - CHEMICAL PRINCPL HEALTH PROFESSN *+
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1 *+
- NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1 *+
- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2 *+
- NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2 *+
- NUR 0031 - MICROBIOLOGY *+
- NUR 0032 - MICROBIOLOGY LABORATORY *+
- NUR 0066 - NUTRITION FOR CLINICAL PRACTICE
- Psychology 3 cr.
- Communication/Public Speaking 3 cr.
- Sociology 3 cr.
- Statistics (descriptive, probability & inferential) completed within past 10 years 3 cr. +
- **Total Credits: 37**

Note:

* Completed within past 10 years
+ B- or higher grade required
Credits listed are term credits (quarter courses will be individually evaluated)
+ Credits may be transferred from other University/College institutions for credit if approved by University of Pittsburgh School of Nursing

RN Options Prerequisite Nursing Courses

(may be transferred as block credits from completed Associate Degree or credit by course examination - challenged by standardized National League of Nursing (NLN) exam/case study for Diploma graduates)

- NUR 0081 - FOUNDATIONS OF NURSING PRACTICE 2
- NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS
- NUR 0082C - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL
- NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES
- NUR 1050C - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL
- NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS
- NUR 1060C - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL
- NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS
- NUR 1120C - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL
- NUR 1054 - NURSING CARE OF OLDER ADULTS
- **Total Credits: 31**

Curriculum:

RN Options - Early Admission to MSN or DNP

Tier 1:

BSN Courses

- NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE
- NUR 0086 - NURSING INFORMATICS
- NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN
- NUR 1085 - ETHICS IN NURSING AND HEALTH CARE
- NUR 1128 - COMMUNITY HEALTH NURSING
- NUR 1127C - COMMUNITY HEALTH NURSING CLINICAL
- NUR 1074 - PROFESSIONAL DEVELOPMENT AND PRACTICUM 1
- NUR 1079 - PROFESSIONAL DEVELOPMENT AND PRACTICUM 2
- NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING
- NUR 1021C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL
- NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE
- NUR 1134C - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL

Total: 28

Tier 2:

Graduate Bridge Courses (Applicable to BSN and selected MSN or DNP Program)

- NUR 2000 - RESEARCH FOR EVIDENCE-BASED PRACTICE 1
- NUR 2004 - PATHPHYLGY ACROSS LIFE SPAN
- NUR 2044 - NUR GRAD ORIENTATION MODULE
- NUR 2010 - HEALTH PROMO/DISEASE PRVNTN
- NUR 2011 - APPLIED STATISTICS FOR EBP
- NUR 2031 - DIAGC PHYSCL EXAM LIFE SPAN **
- NUR 2680 - INTRO GENETCS & MOLEC THERPUTC **

- NURSP 2061 - ORGANIZTNL & MANAGEMENT THEORY **
- NURSP 2092 - LEADERSHIP DEVELOPMENT **

Total: 24

Note:

** Alternate courses tailored to selected graduate program curriculum (with advisor guidance)

Tier 3: (BSN Degree Awarded)

Students will need to submit a BSN graduation application at the beginning of the last term of the above 24 credits.

Remaining Courses in Selected MSN or DNP Program

Note:

+ Credits may be transferred from other University/College institutions for credit if approved by University of Pittsburgh School of Nursing

Note: All previous coursework corresponding to this curriculum must have been completed within 10 years of admission to the University of Pittsburgh.

Students who wish to pursue traditional BSN only will be scheduled individually by academic advisor.

Nursing - RN Options - RN-BSN

RN Options General Education courses

Prerequisites:

(U.S. institution courses-evaluated for equivalency to University of Pittsburgh courses)

- Anthropology 3 cr.
- English Composition 3 cr.
- CHEM 0910 - CHEMICAL PRINCPL HEALTH PROFESSN *+
- NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1 *+
- NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1 *+
- NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2 *+
- NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2 *+
- NUR 0031 - MICROBIOLOGY *+
- NUR 0032 - MICROBIOLOGY LABORATORY *+
- NUR 0066 - NUTRITION FOR CLINICAL PRACTICE
- Psychology 3 cr.
- Communication/Public Speaking 3 cr.
- Sociology 3 cr.
- Statistics (descriptive, probability & inferential) completed within past 10 years 3 cr. +
- **Total Credits: 37**

  Note:
  * Completed within past 10 years
  + B- or higher grade required
  Credits listed are term credits (quarter courses will be individually evaluated)
  + Credits may be transferred from other University/College institutions for credit if approved by University of Pittsburgh School of Nursing

RN Options Prerequisite Nursing Courses

(may be transferred as block credits from completed Associate Degree or credit by course examination - challenged by standardized National League of Nursing (NLN) exam/case study for Diploma graduates)

- NUR 0081 - FOUNDATIONS OF NURSING PRACTICE 2
- NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS
- NUR 0082C - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL
- NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES
- NUR 1050C - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL
- NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS
- NUR 1060C - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL
- NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS
- NUR 1120C - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL
- NUR 1054 - NURSING CARE OF OLDER ADULTS
- **Total Credits: 31**

Curriculum

BSN Courses

- NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE
- NUR 0086 - NURSING INFORMATICS
- NUR 0020 - PATHOPHYSIOLOGIC FOUNDATIONS OF NURSING CARE
- NUR 1680 - INTRODUCTION TO GENETICS AND MOLECULAR THERAPEUTICS
- NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN
- NUR 1085 - ETHICS IN NURSING AND HEALTH CARE
- NUR 1128 - COMMUNITY HEALTH NURSING
- NUR 1127C - COMMUNITY HEALTH NURSING CLINICAL
- NUR 1074 - PROFESSIONAL DEVELOPMENT AND PRACTICUM 1
- NUR 1079 - PROFESSIONAL DEVELOPMENT AND PRACTICUM 2
- NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING
- NUR 1021C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL
- NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE
- NUR 1134C - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL
- SENIOR SPECIAL TOPIC - NUR 2865 FUNDAMENTALS OF DISASTER AND MASS CASUALTY OR NUR 2004 - PATHOPHYSIOLOGY ACROSS THE LIFESPAN
- NUR 2010 - HEALTH PROMO/DISEASE PRVNTN
- ELECTIVES - 10 OR 12 CREDITS

Total: 52

Total Credits: 120

School of Nursing Faculty

Full-Time Faculty

- Sheila A. Alexander, PhD, University of Pittsburgh
- Marianne Allen, DrNP, Drexel University
- Salah S. Al-Zaiti, PhD, University of Buffalo
- Maighdlin Anderson, DNP, University of Pittsburgh
- Michael D. Beach, DNP, University of Pittsburgh
- Sarah Belcher, PhD, University of Pittsburgh
- Jenna Bench, DNP, University of Pittsburgh
- Victor R. Bench DNP, University of Pittsburgh
- Catherine M. Bender, PhD, University of Pittsburgh

- Alice M. Blazeck, DNSc, University of Pennsylvania
- Betty J. Braxter, PhD, University of Pittsburgh
- Marnie L. Burkett, DNP, Chatham University
- Judith A. Callan, PhD, University of Pittsburgh
- Grace B. Campbell, PhD, University of Pittsburgh
- Brenda L. Cassidy, DNP, University of Pittsburgh
- Denise Charron-Prochownik, PhD, University of Michigan
- Eileen R. Chasens, PhD, University of Alabama at Birmingham
- Cynthia Chew, DNP, University of Pittsburgh
- Tim M. Coleman, DNP, Carlow University
- Yvette P. Conley, PhD, University of Pittsburgh
- Rose E. Constantino, PhD, University of Pittsburgh
- Elizabeth A. Crago, PhD, University of Pittsburgh
- Cynthia A. Danford, PhD, University of California, San Francisco
- Jason J. Dechant, PhD, University of Pittsburgh
- Jill R. Demirci, PhD, University of Pittsburgh
- Annette J. DeVito Dabbs, PhD, University of Pittsburgh
- Andrew Dierkes, PhD, University of Pennsylvania
- Heidi A. Donovan, PhD, University of Wisconsin-Madison
- Willa M. Doswell, PhD, New York University
- Jacqueline M. Dunbar-Jacob, PhD, Stanford University
- Sandra J. Engberg, PhD, University of Pittsburgh
- Becky L. Faett, PhD, University of Pittsburgh
- Christine A. Feeley, PhD, University of Alabama at Birmingham
- Laura A. Fennimore, DNP, University of Pittsburgh
- Lisa Y. Foertsch, DNP, University of Pittsburgh
- Sandra A. Founds, PhD, University of Massachusetts
- Hayley Germack, PhD, University of Pennsylvania
- Catherine Grant, DNP, Chatham University
- Jane Guttendorf, DNP, University of Pittsburgh
- Alice J. Haines, DNP, University of Pittsburgh
- Melissa Harlan, DNP, University of Pittsburgh
- Richard A. Henker, PhD, University of Washington
- Rosemary L. Hoffmann, PhD, University of Pittsburgh
- Marilyn T. Hravnak, PhD, University of Pittsburgh
- Chris C. Imes, PhD, University of Washington
- Brayden Kameg, DNP, University of Pittsburgh
- Jacob K. Kariuki, PhD, University of Massachusetts
- Robert R. Kaufman, PharmD, Duquesne University
- Linda K. Kelly, JD, Duquesne University
- Carolyn A. King, MSN, Chatham University
- Julius M. Kitutu, PhD, University of Pittsburgh
- Theresa Koleck, PhD, University of Pittsburgh
- Lisa M. Kreashko, DNP, University of Pittsburgh
- Claudia M. Kregg-Byers, PhD, University of Pittsburgh
- Heeyoung Lee, PhD, University of Washington
- Young Ji Lee, PhD, Columbia University
- Dan Li, PhD, University of Miami
- Jennifer H. Lingler, PhD, University of Pittsburgh
- Faith S. Luyster, PhD, Kent State University
- Grant R. Martsolf, PhD, Penn State University
- Geraldine M. Maurer, DNP, Waynesburg University
- Judith A. Mermigas, DNP, Case Western Reserve University
- Susan E. Miller, DNP, University of Pittsburgh
- Laurel Miner, PhD, Capella University
- Ann M. Mitchell, PhD, University of Pittsburgh
- Jonna Morris, PhD, University of Pittsburgh
- Michael W. Neft, DNP, Chatham University
- Nancy A. Niemczyk, PhD, University of Pittsburgh
- Marci L. Nilsen, PhD, University of Pittsburgh
- Lorraine M. Novosel, PhD, University of South Florida
- John M. O'Donnell, DrPH, University of Pittsburgh

- Joshua Palmer, DNP, BS, RN, University of Pittsburgh
- Barbara Rauscher, PhD, East Tennessee State University
- Dianxu Ren, PhD, University of Pittsburgh
- Margaret Q. Rosenzweig, PhD, University of Pittsburgh
- Elizabeth A. Schlenk, PhD, University of Michigan
- Paul W. Scott, PhD, University of Pittsburgh
- Jennifer B. Seaman, PhD, University of Pittsburgh
- Susan M. Sereika, PhD, University of Michigan
- Paula R. Sherwood, PhD, Michigan State University
- Lucille A. Sowko, PhD, University of Pittsburg
- Teresa L. Thomas, PhD, University of Pittsburgh
- Patricia K. Tuite, PhD, University of Pittsburgh
- Darcy Waechter, DNP, University of Pittsburgh
- Weiwen Wang, DNP, University of Pittsburgh
- Karin Warner, DNP, Duke University
- Susan W. Wesmiller, PhD, University of Pittsburgh
- Daniel Wilkenfeld, PhD, Ohio State University
- Cecelia C. Yates Binder, PhD, Tuskegee University
- Judith F. Zedreck Gonzalez, DNP, University of Pittsburgh
- Jamie M. Zelazny, MPH, University of Pittsburgh
- Fei Zhang, PhD, University of Miami

Part-Time Faculty

- Virginia L. Allison, DNP, University of Pittsburgh
- Thomas L. Bassett, MSN, University of Pittsburgh
- Nicholas Bircher, MD, University of Pittsburgh
- Vivian J. Boyer, DNP, Chatham University
- Lora E. Burke, PhD, University of Pittsburgh
- Theresa Calderone, EdD, Nova Southeastern University
- Megan Dill, DNAP, Missouri State University
- Bettina A. Dixon, DNP, University of Pittsburgh
- Julie Eiler, MSN, University of Pittsburgh
- Andrea F. Fischl, PhD, University of Pittsburgh
- Jason C. Fisher, DNP, University of Pittsburgh
- Ashley Foster, MSN, California University of Pennsylvania
- Sharyn A. Gesmond, MSN, University of Pittsburgh
- Joseph Goode Jr., PhD, University of Pittsburgh
- Christina R. Lauderman, MSN, Robert Morris University
- Maria Leventis, MSN, New York University College of Nursing
- Eileen M. Maly, MSN, Indiana University of Pennsylvania
- Judith T. Matthews, PhD, University of Pittsburgh
- Joseph G. Mattis, MSN, University of Pittsburgh
- Robin W. Mays, MBA, Waynesburg University
- Kathleen S. Perdziola, MSN, Kent State University
- Cecelia Ratay, DNP, University of Pittsburgh
- Jeffrey M. Rohay, PhD, University of Pittsburgh
- Mandy J. Schmella, PhD, University of Pittsburgh
- Jessica G. Tillia, MS, University of Pittsburgh
- Kara Whitehill, MSN, Liberty University

School of Pharmacy

Chartered in 1878, the School of Pharmacy has a tradition of developing leaders and innovators that drive the future of pharmacy. We investigate, discover, and create ways to improve patient health and, through partnerships, change practice and improve efficiency of care. We also use computational and bench research methods to discover and develop drugs and drug delivery systems, and optimize drug therapy. The School of Pharmacy leads the way in education, personalizing education and getting students to expert faster. The School of Pharmacy is among the oldest pharmacy schools in the country. **Pitt Pharmacy is in the top tier of schools of pharmacy in US News & World Report rankings and NIH-funded research.**

Mission
The School of Pharmacy is committed to improving health through excellence, innovation, and leadership in education of pharmacists and pharmaceutical scientists, in research and scholarship, in care of patients, and in service to our communities.

Vision
To be an outstanding school of pharmacy renowned for excellence in discovery and advancement of science-based use of medicines and other interventions to enhance the vitality and quality of life.

Values
Integrity guides our daily work. We foster:
Passion, commitment, and diligence
Creativity and personal growth
Collaboration and teamwork
A culture of respect for the individual.

Contact Information

University of Pittsburgh
School of Pharmacy
Pittsburgh, PA 15261
Admissions: 412-383-9000
rxschool@pitt.edu
www.pharmacy.pitt.edu

Admissions

The School of Pharmacy admits students to its programs under one of two statuses - guarantee or open. The guarantee admission status is detailed below:

Pharmacy Guarantee Freshman Admission

All students should first submit an application to the University of Pittsburgh, Office of Admissions and Financial Aid. The School of Pharmacy does not directly admit freshmen to the professional program. Rather, candidates who specify pre-pharmacy on their application, demonstrate academic success in high school, and score 1330 or higher on the SAT I (Math and Critical Reading sections), with a minimum of 660 in the Math section, will be offered a pharmacy guarantee if available. Students who receive the guarantee are expected to perform well in their pre-professional courses. In order to secure a place in the PharmD Program, students must earn:

- a letter grade of a C or better in all preprofessional courses with no repeated courses
- a 3.25 or greater overall GPA in preprofessional courses
- a competitive Math and Science GPA of 3.0

NOTE: Required Math and Science courses must be taken at the University of Pittsburgh (AP credits are acceptable).

To exercise the conditional admission, all applicants must:

- submit the Pharmacy College Admissions Test (PCAT) scores
- submit a completed PharmCAS application and fee
- participate in a satisfactory interview prior to School of Pharmacy Admission

Students who meet these performance criteria will be admitted into the PharmD Program.

All students interested in applying to the pharmacy program should also consult the Application for Admission of the *Graduate and Professional Catalog*.

Visit the School of Pharmacy Web site at www.pharmacy.pitt.edu.

Program Offerings

Major

Pharmaceutical Sciences, BSPS

The School of Pharmacy offers the opportunity for enrolled PharmD students to obtain a Bachelor of Science in Pharmaceutical Sciences (BSPS) degree after the completion of a minimum of 120 credit hours. Typically, students will have completed the pre-professional component and the first four academic terms (semesters) of the nine term (semester) PharmD program. Students are not enrolled into the BSPS program without admission to the PharmD program.

The school also offers graduate programs leading to an MS and a PhD.

For further information on the professional and graduate programs, see the School of Pharmacy-Graduate and Professional Degrees sections of the Graduate & Professional Studies Catalog.

Contact Information

School of Pharmacy
Admissions: 412-383-9000
E-mail: rxschool@pitt.edu
www.pharmacy.pitt.edu

School of Pharmacy Faculty

School of Social Work

The School of Social Work was founded in September 1938 as successor to the Division of Social Work in the Department of Sociology. The Bachelor of Arts in Social Work (BASW) program was accredited in 1973 and has been continuously reaffirmed since that time.

The mission of the School of Social Work is to advance knowledge and to apply that knowledge for the fulfillment of human potential through the prevention and amelioration of social problems. The school is committed to promoting the values of social and economic justice. Recognizing the complexities of contemporary society, the school dedicates itself through its educational, research, and public service activities to advocating for a society that respects the dignity and achievement of all individuals, families, and communities.

In furtherance of its mission, the School of Social Work strives to

- Educate professional social workers with the knowledge, skills, and values needed to engage in culturally competent practice with diverse populations and communities; to critically analyze personal, familial, and environmental factors affecting practice settings and practice techniques; and to advocate for those who confront barriers to maximizing the achievement of their fullest potential.
- Engage in scholarly activities that contribute to professional knowledge about complex social problems and innovative approaches to ameliorate those problems.
- Provide service to local, national, and international communities through the development of and participation in collaborations with social agencies, community-based organizations, government, and foundations.

In concert with the School's mission, the BASW Program, built on a strong liberal arts base, prepares its students to be competent entry-level generalist social work practitioners and for graduate education. Recognizing the profession's values of service, social justice, the dignity and worth of the person, the importance of human relationships, integrity, competence, human rights, and scientific inquiry, the program provides students with the knowledge and skills needed to advance human and community well-being. Utilizing a person-in-environment framework, the program prepares students to enhance the quality of life for all people, locally and globally; to practice with diverse populations; to analyze critically the social, economic, and environmental factors affecting individuals, families, groups, organizations, and communities; and to advocate for those who confront structural barriers; thus, program graduates are prepared for service and leadership. Since 2001, the BASW Program has offered the Child Welfare Education for Baccalaureates (CWEB) program as an educational opportunity for undergraduate social work majors to prepare for employment in one of Pennsylvania's 67 public child welfare agencies.

The BASW Program is offered as an upper-division (i.e., junior and senior years only) academic major, underscoring the program's commitment to a strong liberal arts base. Learn more about degree requirements, full- and part-time enrollment options and class schedule, and field education for BASW students.

The Social Work Minor is open to undergraduate students throughout the university (see minor requirements)

The Goals of BASW Program are to prepare students to competently engage in generalist social work practice.

As such, it is our goal that by completion of the program, students will be prepared to:

- Practice with cultural humility in accordance with the principles, values, and ethics that guide the social work profession.
- Use their liberal arts foundation and their understanding of bio-psycho-social-spiritual-cultural development to engage in evidence-informed generalist social work practice with individuals, families, groups, organizations, and communities within a multicultural society.
- Advocate for human rights and social, economic, and environmental justice.
- Continue formal education either in graduate social work education or in some other graduate discipline.

The BASW Program Faculty have defined "generalist practice" as:

<u>The application of knowledge, values, and skills of the general method of problem-solving, which spans the processes of engagement, data collection, assessment, intervention, evaluation, and termination</u>. Preparation in the general method focuses on the application of the method to client/consumer systems of various sizes (individuals, families, groups, communities, organizations). Key to this problem-solving approach is its applicability to multi-cultural contexts, focusing on the strengths inherent in clients/consumers' and systems. The ethics and values of the social work profession anchor this practice.

The BASW Program has also identified a number of more specific and measurable objectives that allow us to document progress toward attaining our goals. We expect graduates from the BASW Program to practice in a manner consistent with social work traditions, values, and ethics, as expressed in the NASW Code of Ethics.

Contact Information

University of Pittsburgh
School of Social Work Office of Admissions
Room 2101 Cathedral of Learning
Pittsburgh, PA 15260
412-624-6302

Fax: 412-624-6323
j.oliver@pitt.edu
www.socialwork.pitt.edu

Special Opportunities

The Child Welfare Education for Baccalaureates (CWEB) Program provides an educational opportunity for students interested in public child welfare services. Qualified students who are enrolled as social work majors may receive substantial financial support in return for a contractual obligation to accept employment in a Pennsylvania public child welfare agency following completion of their social work degree. Students interested in the program should contact Dr. Cynthia Bradley-King, CWEB Coordinator, School of Social Work at ckb11@pitt.edu or 412-624-2830.

The Behavioral Health Case Management Program is a certificate available to Social Work and Psychology majors, that leads to possible employment opportunities in a fast paced behavioral health service sector. To read more about the career opportunities available to graduates who hold this certificate please visit the Allegheny County Department of Human Services (DHS) web page.

More information about the program is available on the web and by contacting the Director of the Bachelor of Arts in Social Work Program, Keith J. CaldweToya Jones, MSW at toyaj@pitt.edu or 412-648-9306.

Admission Requirements

For admission to the Bachelor of Arts in Social Work program (BASW), a student must meet the following requirements:

- Completion of 60 transferable credits from an accredited undergraduate institution and/or completion of an accredited associate degree program.
- A minimum of 2.50 GPA on a 4.00 scale.

The distribution of liberal arts credits should be as follows:

- Humanities-9 credits
- Natural Sciences-9 credits
- Social Sciences-9 credits
- Other courses (preferably a computer skills course and courses in the humanities and behavioral and social sciences)-33 credits

Credits awarded from the College Level Examination Program [CLEP] by the College of General Studies are counted toward the 60 credits. Academic and field education credits are not granted in the BASW program for life, volunteer, or employment experience.

Application Procedures

Students may apply for the fall term or spring term. Students currently enrolled within the University of Pittsburgh system should submit applications and all credentials to the School of Social Work Office of Admissions. Students applying from outside the University of Pittsburgh should send all application materials and credentials directly to the University Office of Admissions and Financial Aid (see Pittsburgh campus Freshman Admissions for address). The Undergraduate program in the School of Social Work has a ROLLING ADMISSIONS POLICY. There is no specific deadline for submitting applications.

- The application fee of $45 (only if applying from another institution; current University of Pittsburgh students do not have to pay this fee).
- A complete transcript from the registrar of each college attended. If course work is still in progress at the time the application is filed, the student should request a supplemental transcript at the end of each term. Although a decision for acceptance may be made while academic work is still in progress, an up-to-date transcript must be received before the applicant can register for course work. Persons seeking a transfer to the University of Pittsburgh from another college or university must also submit a high school transcript or its equivalent.
- A three-part typewritten statement (of no more than eight pages) discussing the following concerns in depth:
- the influence in the student's life experience that made him/her select social work as a profession,
- what the student believes social work education can contribute to his/her professional competence, and
- what the student believes to be one of the most important contemporary social issues and why.
- The application supplement sheet, which requests information on the student's employment background, a list of the names and addresses of the people who will be completing reference forms on the applicant's behalf, and academic credit requirement questions.
- Three letters of reference. **Required** references include college advisors, an instructor at the college level, and the current (or last) employer/volunteer supervisor. Applicants should send the blank reference forms received with the application materials to each of the reference persons. The School of Social Work admissions office will periodically notify the applicant of the status of the application materials, and the applicant will be expected to follow through with each reference to ensure receipt of the letter. Reference persons should mail the completed form directly to the School of Social Work Office of Admissions.

Other Supporting Application Materials

The School of Social Work does not require the submission of scores from an examination for admission consideration. However, applicants wishing to submit such exam scores or other materials (publications, major papers, etc.) in support of their application may do so. In no instance will an applicant not submitting these be penalized in determining acceptance for the program.

Admission Interviews

Interviews may be initiated by the admissions personnel of the School of Social Work. Applicants who feel they would like to discuss special circumstances surrounding their applications are encouraged to seek admission interviews. The interview, if requested, should be scheduled after all application materials have been received. Usually, decisions on applications for admission are made without an interview.

Grading Standards Policy for the BASW Program

This policy covers the following areas in regard to grading:

Good Academic Standing

In order to remain in good academic standing and to graduate from the BASW program, all students must

- Obtain a grade of C- or better in all courses required for the major (including Practicum 1 and 2),
- Maintain a minimum 2.50 on a 4.00 scale in their social work major
- Conform to the standards of professional conduct as specified in the NASW Code of Ethics (see below), and
- Maintain a minimum cumulative GPA of 2.50 on a 4.00 scale.

Honors

The program honors those students whose academic performance (cumulative GPA) places them in the upper two percent of their graduating class. These students are considered for honors recognition at the annual Honors Convocation conducted by the University in the spring of each year. BASW majors are also eligible for membership in *Phi Alpha*, the National Social Work Honor Society, if they have completed their social work major with a social work GPA of 3.85 or higher.

Bachelor of Philosophy Degree

In the spirit of intellectual curiosity envisioned by the Board of Trustees and the University Honors College when the Bachelor of Philosophy degree (BPhil) was created, the BPhil creates the opportunity for undergraduate students to engage in research and scholarly work toward a more rigorous baccalaureate degree traditionally reserved for the graduate level. In combination with the University Honors College requirements it, "preserves an element of intellectual scope, ever the distinctive feature of American undergraduate education (A. Stewart)." This degree is offered jointly between the University Honors College and the School of Social Work.

BASW majors who meet the University Honors College (UHC) eligibility requirements and who are interested in pursuing a Bachelor of Philosophy degree in social work should make an appointment with the BASW Program Director to review criteria and process for the degree.

The BASW student will be referred to the University Honors College Web site to review the Bachelor of Philosophy degree requirements.

The requirements to participate in the UHC are as follows:

- Maintain a 3.50 GPA or higher in BASW major in the School of Social Work and a 3.50 GPA or higher overall at the University of Pittsburgh.
- Transfer students must have an incoming GPA of 3.50 or higher and maintain a 3.50 GPA in BASW major course work offered through the School of Social Work as well as a 3.50 GPA or higher overall at the University of Pittsburgh.
- In unusual circumstances, a student who shows exceptional promise but does not meet the above requirements may be accepted to BPhil candidacy as recommended by the BASW Program Director to the School of Social Work Associate Dean for Academic Affairs and determined by the UHC advising staff.

Based upon a BASW student's area of interest, a thesis advisor will be assigned by the Associate Dean for Academic Affairs. The BASW Program Director and the student's advisor will meet with the student to draft a program of study/curriculum plan. Assignment of an advisor is contingent upon faculty availability and willingness to serve.

General degree requirements are:

- Fulfill the BASW degree requirements with a minimum 3.50 GPA.
- Complete the social work general education requirements with a minimum 3.50 GPA. This includes 24 credits in the social and behavioral sciences; minimum of 3 credits in Africana studies; minimum of 3 credits in English composition; minimum 3 credits in human biology and a minimum of 3 credits in statistics.
- Enroll in one course in each of the following areas, selecting one as an area of specialization, with a minimum of 12 credits and grades corresponding to a 3.50 GPA or higher: Africana studies; anthropology; economics; global studies; political science; psychology; sociology; urban studies; women's studies.
- In all of the above coursework, a prospective BPhil student is encouraged to enroll in an UHC section of the course, if available. Overall GPA requirements remain the same for these courses.

The prospective BPhil student will make an appointment with the UHC advising staff regarding Honors College qualifications for degree candidacy.

The prospective BPhil student will complete the BASW degree requirements listed above as well as complete

"Special Degree Requirements". These include:

1. Completion of independent research culminating in the production of an original undergraduate thesis.

• The thesis will be completed under the tutelage of the faculty advisor who will guide the student in designing and implementing the research project as well as in writing the thesis.

• At least two terms prior to the B.Phil. in Social Work student's expected date of graduation a synopsis of the proposed research (approved by the School of Social Work thesis advisor) will be submitted to the University Honors College.

• By the last term in residence, the student will: Submit a revised and completed thesis to their Faculty Advisor (for distribution to the Examining Committee) at least five weeks prior to the end of the term.

Defend their thesis to a faculty Examination Committee selected by the faculty advisor.

a. Include a faculty member from outside the University of Pittsburgh as an invited member of the Examination Committee.

b. Consist of a public presentation and discussion of the thesis project followed by a private oral examination conducted by the Examining Committee.

Recommendation from the Faculty Examination Committee for the awarding of the B.Phil. in Social Work degree will be made to the Dean of the Honors College, who, after certifying that all aspects of the BASW degree requirements as well as the B.Phil. Special Degree Requirements have been fulfilled, will make a recommendation to the UHC. The B.Phil. in Social Work degree will be conferred jointly by the School of Social Work and the UHC through the granting of a single Bachelor of Philosophy in Social Work diploma.

If all of the degree requirements are met, a single degree, the Bachelor of Philosophy degree with a major in social work, will be conferred jointly by the School of Social Work and the University Honors College.

For additional details on this degree program, please contact the School of Social Work or the Honors College.

National Association of Social Workers (NASW) Code of Ethics

Professional ethics are at the core of social work. The profession has an obligation to articulate its basic values, ethical principles, and ethical standards. The NASW Code of Ethics sets forth these values, principles, and standards to guide social workers' conduct. The code is relevant to all social workers and social work students, regardless of their professional functions, the settings in which they work, or the populations they serve. The NASW Code of Ethics serves six purposes:

- The code identifies core values on which social work's mission is based.
- The code summarizes broad ethical principles that reflect the profession's core values and establishes a set of specific ethical standards that should be used to guide social work practice.
- The code is designed to help social workers identify relevant considerations when conflicting professional obligations or ethical uncertainties arise.
- The code provides ethical standards to which the general public can hold the social work profession accountable.
- The code socializes practitioners new to the field to social work's mission, values, ethical principles, and ethical standards.

- The code articulates standards that the social work profession itself can use to assess whether social workers have engaged in unethical conduct. NASW has formal procedures to adjudicate ethics complaints filed against its members. In subscribing to this code, social workers are required to cooperate in its implementation, participate in NASW adjudication proceedings, and abide by any NASW disciplinary rulings or sanctions based on it.

The code offers a set of values, principles, and standards to guide decision making and conduct when ethical issues arise. It does not provide a set of rules that prescribe how social workers should act in all situations. Specific applications of the code must take into account the context in which it is being considered and the possibility of conflicts among the code's values, principles, and standards. Ethical responsibilities flow from all human relationships, from the personal and familial to the social and professional. Social work students are required to comply with the NASW Code of Ethics. Copies can be obtained from the NASW Web page at www.socialworkers.org.

Statute of Limitations

There is a seven-year limitation on the earning of the BASW degree with the seven-year period beginning from the date of entry into the program. Under the following extenuating circumstances, the advisor may recommend an extension of time to the program director and the associate dean:

- Extended illness of the student,
- Involuntary mobilization into a U.S. military unit,
- Death of a close family member,
- Extended personal emergency, or
- Academic probation in the last term of the student's program.

Undergraduate Advising

When admitted, new BASW majors are assigned an advisor by the BASW program director (students completing the social work minor maintain the academic advisor in their current college or school). Incoming BASW majors meet their assigned faculty advisor at the school's orientation, which is held prior to the start of fall semester. Incoming students are then encouraged to make an appointment with their faculty advisor during the first three to four weeks of the term. Each advisor will work with his or her advisee to clarify educational options, answer questions about the BASW Program, and discuss career opportunities. When students enroll for Practicum Seminar I and the concurrent Practicum Seminar and Lab I, the seminar and lab instructor in the section the student chooses becomes his or her faculty advisor for the remainder of their enrollment in the program. Faculty advisors should be the first point of contact for any or all of the following:

- Registration including add/drop, leaves of absence, and withdrawals; Clarification of all academic policies and procedures (i.e., grading policies, graduation requirements, directed study);
- Discussions regarding academic expectations and performance;
- Information about other departments and/or programs in the School of Social Work or the University of Pittsburgh;
- Planning of the student's educational program in accordance with his or her career interests.

Phi Alpha National Honor Society

Mu Omicron Chapter

Phi Alpha Honor Society was created to provide a closer bond between social work students and the profession in order to promote humanitarian goals and ideals. With the motto, "Through knowledge-the challenge to serve," Phi Alpha fosters high standards of education for social workers and invites into membership those who have attained excellence in scholarship and achievement in social work. Founded in 1960, Phi Alpha Honor Society currently has more than 110 chapters nationwide.

School of Social Work Faculty

Yodit Betru, *Director, MSW Program and Assistant Professor,* DSW, University of Pennsylvania

Jaime Booth, *Associate Professor,* PhD, Arizona State University

Laura Borish, *CWEB/CWEL Agency Coordinator and Field Assistant Professor,* MSW, University of Pittsburgh

Cynthia K. Bradley-King, *Clinical Assistant Professor and Academic Coordinator, Child Welfare Education For Baccalaureates Program,* PhD, Indiana University of Pennsylvania

Helen Cahalane, *Principal Investigator, Child Welfare Education and Research Programs, Clinical Associate Professor*, PhD, University of Pittsburgh

Keith Caldwell, *Associate Dean for Student Success and Assistant Professor*, EdD, University of Pittsburgh

Melvin Cherry, Jr., *Field Education Coordinator and Lecturer*, MSW, University of Pittsburgh

Valire Carr Copeland, *Professor, Associate Director of the Public Health Social Work Training Program, and faculty affiliate in the Center for Minority Health at the University of Pittsburgh's Graduate School of Public Health*, PhD, University of Pittsburgh

John Dalessandro, *Director of Field Education*, MSW, University of Pittsburgh

Larry Davis, *Donald M. Henderson Professor*, PhD, University of Michigan

Amy DeGurian, *Field Education Coordinator and Lecturer*, MSW, University of Pittsburgh

Aliya Durham, *Assistant Professor and Director of Community Engagement*, MSW, MPIA, University of Pittsburgh

Shawn M. Eack, *James and Noel Browne Endowed Chair, Associate Dean for Research, and Professor of Social Work and Professor of Psychiatry*, PhD, University of Pittsburgh

Stephanie Eckstrom, *Program Coordinator, Pitt-Bradford MSW Program*, MSW, University of Maryland At Baltimore

Rafael J. Engel, *Associate Professor, Associate Dean of Academic Affairs*, PhD, University of Wisconsin

Elizabeth M.Z. Farmer, *Dean*, PhD, Duke University

Rachel Gartner, *Assistant Professor*, PhD, University of California-Berkeley

Sara Goodkind, *Associate Professor, School of Social Work, Department of Sociology, and Gender, Sexuality, and Women's Studies Program*, PhD, University of Michigan

Catherine Greeno, *Associate Professor and Doctoral Program Director*, PhD, Stanford University

James Huguley, *Interim Director, Center on Race and Social Problems and Assistant Professor*, EdD, Harvard University

Leah Jacobs, *Assistant Professor*, PhD, University of California-Berkeley

Aaron R. Mann, *Associate Professor*, PhD, University of Pittsburgh

Alicia Melnick, *Field Education Coordinator and Lecturer*, MSW, University of Pittsburgh

Deborah Moon, *Assistant Professor*, PhD, University of Kansas

Beth Mulvaney, *Clinical Assistant Professor*, University of North Carolina-Chapel Hill

Christina Newhill, *Professor*, PhD, University of California at Berkeley

Mary L. Ohmer, *COSA Chair and Associate Professor*, PhD, University of Pittsburgh

Marlo Perry, Research Assistant Professor, Child Welfare Education and Research Programs, PhD, University of Pennsylvania

Helen Petracchi, *Associate Professor; Director*, PhD, University of Wisconsin at Madison

Mary Elizabeth Rautkis, *Research AssociateProfessor*, PhD, University of Pittsburgh

Daniel Rosen, *Professor*, PhD, University of Michigan

Jeffrey Shook, *Associate Professor*, PhD, University of Michigan

Bobby Simmons, *Director of Career Services*, MSW, University of Pittsburgh

Fengyan Tang, *Professor*, PhD, Washington University in St. Louis

John Wallace, *David E. Epperson Chair and Professor, Center on Race and Social Problems Senior Fellow for Research and Community Engagement*, PhD, University of Michigan

Darren Whitfield, *Assistant Professor, School of Social Work and Department of Psychiatry and Direct Practice Chair*, PhD, University of Denver

Liz Winter, *Clinical Assistant Professor, Child Welfare Resource Center*, PhD, University of Pittsburgh

Misha Zorich, *MSW Program Director, UPJ*, MSW, University of Pittsburgh

Program and Course Offerings

Department of Social Work

Major

Social Work, BASW

Degree Requirements

The School of Social Work requires a minimum of 120 credits for graduation. The courses listed below are required of all students working toward the Bachelor of Arts in Social Work:

Social work courses:

A total of 48 credits in the social work major:

- SOCWRK 1000 - INTRODUCTION TO SOCIAL WORK
  This is a service-learning course and requires 45 hours of volunteer service as part of the course.
- SOCWRK 1005 - FOUNDATIONS OF THE WELFARE STATE
- SOCWRK 1006 - POLICY ANALYSIS
  This is a service-learning course and requires 45 hours of volunteer service as part of the course.
- SOCWRK 1008 - ETHNICITY AND SOCIAL WELFARE
- SOCWRK 1011 - INTRODUCTION TO GENERALIST METHODS: SOCIAL WORK WITH INDIVIDUALS AND FAMILIES
- SOCWRK 1012 - SOCIAL WORK WITH COMMUNITIES AND ORGANIZATIONS
- SOCWRK 1013 - SOCIAL WORK WITH GROUPS
- SOCWRK 1015 - HUMAN BEHAVR & SOCL ENVIRONMENT
- SOCWRK 1020 - INTRODUCTION TO SOCIAL WORK RESEARCH
- SOCWRK 1024 - PRACTICUM SEMINAR AND LAB 1
- SOCWRK 1025 - PRACTICUM 1
- SOCWRK 1026 - PRACTICUM SEMINAR AND LAB 2
- SOCWRK 1027 - PRACTICUM 2

Social and behavioral sciences requirements: 24 credits **

- Anthropology (3)
- Economics (3)
- Gender, Sexuality, and Women's Studies (3)
- Political Science (3)
- Psychology (3)
- Sociology (3)

Note:

Other course requirements: 12 credits **

- Africana Studies (3)
- English Composition (3)
- Global Studies (3)

- Human Biology (or equivalent course emphasizing the biological determinants of human behavior) (3)
- Religion/Spirituality (3)
- Statistics (3)
- Social Work elective (3)

Note:

* Course of equivalent content may have been taken at another institution.

** These courses/credits (in part or in whole) may have been taken as part of the 60 credits required for admission. Any of these courses/credits not taken prior to admission must be completed prior to graduation.

Minor requirements:

The minor requires successful completion (with a grade of C- or better) of four of the following three-credit courses:

- SOCWRK 1000 - INTRODUCTION TO SOCIAL WORK
  This is a service-learning course and requires 45 hours of volunteer service as part of the course.
- SOCWRK 1005 - FOUNDATIONS OF THE WELFARE STATE
- SOCWRK 1006 - POLICY ANALYSIS
  This is a service-learning course and requires 45 hours of volunteer service as part of the course.
- SOCWRK 1035 - GLOBAL PERSPECTIVES SOCIAL WORK
- SOCWRK 1058 - ECONOMICS AND SOCIAL WORK
- SOCWRK 1079 - CHILD WELFARE SERVICES
- SOCWRK 1088 - SPECIAL TOPICS
  This course is not offered every term.

Note:

* SOCWRK 1000 - INTRODUCTION TO SOCIAL WORK is required for all subsequent courses, with the exception of SOCWRK 1005

Social Work, BPHIL

University Center for International Studies

The University Center for International Studies (UCIS) is the primary resource for initiating and managing international programs, studies and support services while promoting the University's reputation as a leader in global education. A key goal of UCIS is to cultivate globally capable and engaged students toward lives of impact in their community and beyond. In short, to prepare undergraduate students who are global ready. This is achieved by certificate programs, study abroad, curriculum development, and seminars. UCIS offers 9 certificates and 3 related concentrations, which are academic credentials that attest to acquisition of international knowledge about a particular world region or global issue, cross-cultural understanding, and language proficiency relevant for international careers or for advanced degrees. Certificates are available in:

- African Studies
- Asian Studies
- East European Studies
- European Union Studies
- Global Studies
- Latin American Studies
- Russian Studies
- Transatlantic Studies
- West European Studies

The certificates are administered through the African Studies Program, Asian Studies Center, European Studies Center, Global Studies Center, Center for Latin American Studies, and the Center for Russian and East European Studies. Four centers--European Studies Center, Global Studies, Latin American Studies, and Russian and East European Studies--are designated by the federal government as National Resource Centers.

UCIS certificates evidence language proficiency, regional knowledge and cultural competency that students find useful for international careers or for advanced degrees with a concentration in a particular world area or global theme.

Contact Information

University of Pittsburgh
University Center for International Studies
4413 Wesley W. Posvar Hall
Pittsburgh, PA 15260
412-648-7390
ucis@pitt.edu
www.ucis.pitt.edu

Admission to Certificate Programs

Formal admission to the UCIS certificate programs is accomplished by completing a simple application form. Interested students are encouraged to apply in their freshman or sophomore year. There are no special requirements for admission. All undergraduate certificate programs in UCIS (with the exception of the certificate programs in Global Studies, European Union Studies and Latin American Studies described below) require 15 credits/five courses in the applicable area, with three or more courses in at least two departments other than the major. Language requirements vary from four to six terms.

Certificate courses can be used simultaneously to fulfill the student's general education and international/foreign culture requirements. Grades generally must be C or better to be accepted for the certificate program. Upon graduation, both the academic degree and the certificate are posted on the student's transcript.

myPittGlobal

This new student platform is your one-stop-shop to integrate the curricular achievements with study abroad, civic & global engagement and professional development opportunities. The online tools will help you access all UCIS academic programs, study abroad, international events and activities, advisors and your peers. For more information, click here.

Advising

All UCIS certificate programs provide personalized advising services to students interested or registered in its programs in addition to those routinely offered by the students' major advisors. Center advisors assist in selecting courses, language training, and arranging internships or study abroad to fit the students' academic and personal interests. See the program descriptions below for contact information.

Special Academic Opportunities

In addition to the regular certificate programs, UCIS offers the following special academic opportunities:

Asian Studies Scholarships and Fellowships

Students enrolled in the Asian Studies certificate program are eligible for a variety of fellowships and scholarships, including the Chinese Summer Language Study Abroad Scholarships, the Japanese Studies Undergraduate Scholarship, the Study-in-Japan Scholarship, and the Japanese Summer Language Study Scholarship. In addition, a new undergraduate scholarship program for students studying Chinese and Japanese languages is available for study abroad in an approved program. For more information on these funding opportunities, please click here.

Latin American Studies Undergraduate Seminar/Field Trip Program

The Undergraduate Seminar/Field Program is a unique component of the Latin American studies undergraduate certificate program. The Center for Latin American Studies (CLAS) firmly believes that all undergraduates should have the opportunity to experience Latin American culture firsthand. This objective is met through an annual field trip to a selected Latin American country for which about 10 - 14 students are chosen each year. CLAS subsidizes the majority of the cost of this program via scholarships to place it within the means of most students. Student participants register for a seminar in the spring term (January-April) that prepares them for the field experience through study of the culture, economics, geography, history, and politics of the area to be visited. Students also are introduced to research methodology and are guided through the development of a project which forms the basis for research they conduct while in the field. In the summer session (early May-late June), the students travel to Latin America, where they reside with host families and undertake their field projects under the direction of a CLAS faculty member. (In past years, groups have gone to Argentina, Bolivia, Brazil, Colombia, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Mexico, Uruguay, and Venezuela.)

Russian and East European Studies Summer Study Abroad and Internship Awards

The Center for Russian and East European Studies (REES) believes that study or work abroad is a key component of its certificate program. In an effort to encourage students to travel to the region, REES offers several scholarships each summer to students enrolled in the certificate program. In addition, REES offers several awards to its students annually to fund paid internships in Pittsburgh during the academic year in the field of Russian and East European studies.

West European Studies Friedl E. Kessler Memorial Fellowship

To help defray the costs of studying abroad, the European Studies Center offers the Kessler Fellowship for study or research in Germany. This competitive award is offered every year in the amount of $1,000. Any student pursuing the Certificate in West European Studies who studies German and has at least a 3.0 GPA is eligible to apply.

Program Offerings

African Studies Certificate
Asian Studies Certificate
European Union Studies Certificate
Global Health Certificate
Global Studies Certificate
International and Area Studies, BPHIL
Latin American Studies Certificate and Related Concentration
Russian, East European, and Eurasian Studies Certificate
Transatlantic Studies Certificate
West European Studies Certificate

UCIS Affiliated Faculty

African Studies Program

http://www.ucis.pitt.edu/africa/faculty

Asian Studies Center

http://www.ucis.pitt.edu/asc/academics/faculty

Center for Latin American Studies

http://www.ucis.pitt.edu/clas/faculty_list

Center for Russian & East European Studies

http://www.ucis.pitt.edu/crees/about/faculty

European Studies Center

http://www.ucis.pitt.edu/esc/about/affiliated-faculty

Global Studies Center

http://www.ucis.pitt.edu/global/affiliates

Department of International Studies

African Studies Certificate

University of Pittsburgh
University Center for International Studies
African Studies Program
Anna-Maria Karnes, Undergraduate & Graduate Advisor and Outreach Coordinator
4137 Wesley W. Posvar Hall
Pittsburgh, PA 15260
Phone: 412-648-8143
Awk19@pitt.edu
www.ucis.pitt.edu/africa

Asian Studies Certificate

University of Pittsburgh
University Center for International Studies
Asian Studies Center
Emily Rook-Koepsel, Undergraduate & Graduate Advisor and Assistant Director for Academic Affairs
4109 Wesley W. Posvar Hall
Pittsburgh, PA 15260
Phone: 412-648-7370

rookkoepsel@pitt.edu
http://www.ucis.pitt.edu/asc/academics/certificate-program/undergraduate-certificate-program

European Union Studies Certificate & Related Concentration

University of Pittsburgh
University Center for International Studies
European Studies Center
Zachary Kimes, Undergraduate Academic Advisor
4215 Wesley W. Posvar Hall
Pittsburgh, PA 15260
Phone: 412-648-7406
z.kimes@pitt.edu
http://www.ucis.pitt.edu/esc/

Global Studies Certificate

University of Pittsburgh
University Center for International Studies
Global Studies Center
Elaine Linn, Undergraduate & Graduate Advisor and Assistant Director
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Latin American Studies Certificate And Related Concentration

University of Pittsburgh
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Center for Latin American Studies
Luis G. Van Fossen Bravo, Undergraduate Advisor
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www.ucis.pitt.edu/clas

Russian And East European Studies Certificate & Related Concentration

University of Pittsburgh
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Center for Russian and Wast European Studies
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West European Studies Certificate

University of Pittsburgh
University Center for International Studies
European Studies Center

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Certificate

African Studies Certificate

Contact Information

Dr. Macrina Lelei, Associate Director
African Studies Program
4137 Wesley W. Posvar Hall
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macrina@pitt.edu
www.ucis.pitt.edu/africa

The Undergraduate Certificate

The African Studies Program facilitates and coordinates the multidisciplinary study, research and conversation about Africa and the African experience. Through a wide range of courses and activities, the program allows students opportunities to learn and develop a better grasp the continent's internal dynamics and its evolving place in the world.

The program sponsors a wide range of learning activities such as lectures, symposia, and conferences that focus on the interconnected issues of development in Africa and the African experience within the wider global context. The program offers opportunities for study abroad in Africa and other forms of field based experiential learning. Limited scholarships are available and interested students enrolled in the African Studies program are encouraged to stop by our office or visit our website for more information.

Certificate Requirements

To receive the Undergraduate Certificate in African Studies each student must complete the following requirements:

- African Studies Courses: Students will complete five courses (15 credits) that must include one core course (3 credits) with 100% Africa-related content, and four electives (12 credits) with at least 25% or more Africa-related content. For a full list of approved courses, click here.

- Language Proficiency: Students will complete two years (4 semesters) of language study of either an indigenous African language (Pitt offers Amharic, Swahili, and Arabic) or, a European language (other than English) that is relevant to African studies because of Africa's historical experience. For example, a student with two years or more of French, Portuguese, German or Spanish meets the language proficiency requirement.

- Digital Portfolio: Each student will complete a digital portfolio highlighting their learning experience and clearly demonstrating their specific growth in knowledge of Africa related issues within their respective academic discipline and in a broader global context. Students must submit their digital portfolio by the provided deadline before graduation. The digital portfolio may include assignments submitted as part of coursework or on the student's own time, and any other examples showing personal or academic growth.

- **Presentation:** Before graduation, each student will be required to present their African Studies related work through sharing highlights of their experiences in a mini-forum to students, friends and family. The program advisor will communicate with each graduating students requirements for the presentations.

GPA in African Studies Courses should be 2.5 or higher.

Academic Opportunities

Study Abroad and Internships: Although Studying abroad in Africa is not required, it is highly encouraged. Students can earn up to 15 credits towards the certificate by studying abroad in an African country. There are also several internship opportunities available to students locally and in Africa. Meet with the academic advisor to learn about these opportunities.

Professional Development: The African Studies Program offers academic internships every semester where a student is given full exposure to the field of African Studies and can earn 3 credits for the internship. Students work on skills such as networking, public speaking, communications, media relations, critical thinking, and knowledge of Africa. This internship is a great way for students to build their resume and get real life experience working for a university.

UCIS International Career Toolkit Series: The Toolkit Series introduces students to the multitude of careers available by meeting and interacting with professionals in a variety of fields. Many of the guests are Pitt alumni and those that graduated with an International Studies Certificate. By attending one of these panels students will gain insight on career choices, what specific careers entail, how to articulate and prepare for short and long term career goals, and utilize resources at Pitt to make their goals a reality. Each year, students enrolled in the certificate program will have the opportunity to visit Washington, DC to interact with professionals and learn about a variety of opportunities for employment possibilities.

Other Outside of the Classroom learning activities: Students can attend lectures and conferences on campus and off campus on a variety of topics that enhance their classroom learning. African studies offers the Let's Talk Africa Series particularly designed for students to share their Africa related learning experiences. In addition the program hosts other forums for knowledge and cultural exchanges including during international week and during Africa Week. Visit our website for more information.

Asian Studies Certificate

University of Pittsburgh
University Center for International Studies
Asian Studies Center
Emily Rook-Koepsel, Undergraduate & Graduate Advisor and Assistant Director for Academic Affairs
4109 Wesley W. Posvar Hall
Pittsburgh, PA 15260
Phone: 412-648-7370
rookkoepsel@pitt.edu
http://www.ucis.pitt.edu/asc/academics/certificate-program/undergraduate-certificate-program

Engage with Asian cultures, languages, histories, and economies through the interdisciplinary Asian Studies Certificate. Building a personalized learning program based on a thematic or regional interest in Asia, the Asian Studies certificate can be accomplished using general education credits to compliment a language or disciplinary major or minor. Undergraduate students from any field or school interested in Asia can supplement and strengthen their major field of study by enrolling in the Asian Studies certificate program. To learn more about the Asian Studies program please contact the Asian Studies Advisor via email (rookkoepsel@pitt.edu) or by making an appointment at http://www.ucis.pitt.edu/asc/academics/advising-appointment-scheduler

Certificate Requirements

- **Asian Area Studies Courses**:

Interdisciplinary understanding of Asia can help build an understanding of broad trends and ideas from many different perspectives. Students earning an Asian Studies Certificate must take a minimum of five courses (15 credits) either designated as an Asian Studies course or which has been approved by the Asian Studies Academic Advisor. You can look at the courses available for the Asian Studies Certificate in any given semester at http://www.ucis.pitt.edu/asc/academics/courses. Required courses for the Asian Studies certificate may overlap with Gen. Ed. requirements and with courses taken on study abroad.

Students must take courses in a total of three different departments. At least one course (3 credits) should be in the student's major, unless their major does not include an Asian Studies designated course, in which case a course from a different department can count towards this requirement.

- **Language proficiency**: A minimum of two years (four terms) of Asian language study at the college level or equivalent proficiency is required. The University of Pittsburgh offers Chinese, Japanese, Korean, Hindi, Vietnamese, and Arabic, but any Asian language at intermediate proficiency would count toward fulfilling the Asian Studies Certificate. Students can fulfill the language requirement through taking two years of college language, demonstrating intermediate proficiency through testing, or by being a native speaker of an Asian language. If you have questions about a language Pitt doesn't teach, please see the Asian Studies advisor.

- **Digital Portfolio:** Students will be given a template to create an Asian Studies digital portfolio soon after they have signed up for the program. Students will work with the digital portfolio site throughout their time in the program, completing the digital portfolio during their final semester at the University of Pittsburgh. The portfolio offers a chance for students to reflect on academics, work/internship experience, study abroad

observations, and co-curricular activities that highlight their Asian Studies experience. Students should work closely with the Asian Studies advisor on the creation of their portfolio. Information on the digital portfolio can be found at www.ucisportfolios.pitt.edu.

- **GPA requirement** is 2.0 for all courses to be counted towards the Asian Studies Certificate.

Financial Assistance

Asian Studies certificate students may be eligible for a variety of scholarships and study abroad awards. For information, visit http://www.ucis.pitt.edu/asc/funding/undergraduate

European Union Studies Certificate

University of Pittsburgh
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European Studies Center
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The European Union (EU) Studies Certificate provides an introduction to the history of European integration, working knowledge of the EU's laws and administrative bodies, economics and the Euro Area, and (depending on the classes chosen) an overview of specific policy areas (defense and security, immigration, economic, international relations, etc.). The certificate provides a multidisciplinary and cross-regional (east-west) perspective, and it is perfect preparation for students who want to pursue careers in both public and private international organizations and to continue the study of Europe and the EU at the graduate level.

The University of Pittsburgh is an internationally recognized center for European Union studies. Selected in 1998, the university is one of 7 European Union Centers of Excellence in the United States (as chosen by the EU itself). The EU certificate has a high visibility that will assist students as they apply to competitive graduate programs in a number of disciplines and to corporations and organizations that interact with the European Union.

Certificate Requirements

- **Six EU studies courses:** (18 credits) from at least three different departments are required. These courses will include PS 1317 - POLITICS OF THE EUROPEAN UNION, PS 1330 - EUROPEAN UNION SEMINAR, one course on the historical foundation of the EU, and three courses on the EU or with significant EU content. Students must earn a C or better in the classes counting towards the certificate.
- Approved courses are posted online at http://www.ucis.pitt.edu/euce/node/142.
- **Language proficiency:** Two years of college-level study of an official European Union foreign language (excluding English). Languages currently available include: Spanish, German, French, Italian, Swedish, Modern Greek, Portuguese, Hungarian, Polish and Slovak. Students may request placement tests through the language department.
- **Digital Portfolio:** This is the culmination of the student's learning experience and demonstrates in-depth knowledge of the West European studies theme the student has chosen. Details will be discussed with the advisor.

Related Concentration in European & Eurasian Studies

The Related Concentration in European & Eurasian Studies is crafted to offer comparative study opportunities for students in a pre-professional field - pre-medicine, pre-law, business, engineering, and health and rehab sciences - while capitalizing on existing European language credits. This individualized, interdisciplinary credential provides a context for studying abroad and complements most academic plans and majors. For the Related Concentration, we define Eurasia as the Russian Federation, Turkey, Mongolia, and the former Soviet republics. For a list of approved courses, please click here.

Requirements

- A **minimum of four** (12 credits) **content courses** is required. The courses must come from at least two different departments and none of the courses can overlap with a student's other credentials. These courses are allowed to overlap, however, with general education requirements. Students must earn a C or better in classes counting towards the certificate.
- **Language proficiency**: one year (two semesters) of college-level study of an official European (excluding English) or Eurasian language, or demonstration of equivalent proficiency. The same language classes (or AP credits) used to fulfill the general education requirement may be used here as well.

- **Digital Portfolio:** This is the culmination of the student's learning experience and demonstrates in-depth knowledge of the West European studies theme the student has chosen. Details will be discussed with the advisor.

Special Academic Opportunities

In addition to the certificate itself, the European Studies Center also offers its students a number of valuable resources, including scholarships for study abroad, directed research opportunities, research assistance, and a full calendar of events and visits from politicians and practitioners from across Europe.

Global Health Certificate

University of Pittsburgh
University Center for International Studies
Global Studies Center
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Pittsburgh, PA 15260
Phone: 412-648-2113
eel58@pitt.edu
http://www.ucis.pitt.edu/global/

With the **CERTIFICATE IN GLOBAL HEALTH**, undergraduates can tailor a program of study to suit their academic, personal, and career interests. There is no additional cost to enroll, and most students will be able to complete the requirements within a standard four-year program of study. There are many options for related study abroad and co-curricular activities.

What You'll Learn

Students who complete the certificate should be able to:

- Understand the global burden of disease, social determinants of health, and treatment disparities from transnational and historical perspectives
- Differentiate among research, programs, strategies, and coordination mechanisms that address these issues in a variety of settings and the organizations that promote them
- Recognize the behavioral and cultural dimensions of health in myriad contexts
- Appreciate how different disciplines approach these issues and apply one or more such approaches to a key question in global health

Critique different discourses on global health (e.g., medical, policy, anthropological) and communicate effectively about these issues orally and in writing to an interdisciplinary audience.

Program Requirements:

The certificate requires 18 credits of coursework, distributed as follows:

Required Course

- PUBHLT 1001 - INTRODUCTION TO GLOBAL HEALTH
  This course lays the foundation for the Certificate and is required for all students. We strongly recommend taking this course as early as possible.

Core Courses (6 credits):

Students will select any two courses from the following list. We recommend that you consult the advisor for guidance on which courses would best support your course of study and career goals.

- NUR 1829 - CONTEM ISSUES CROSS CULTL HEALTH
- LING 1263 - CROSS-CULTURAL COMMUNICATION
- HIST 1091 - GLOBAL HEALTH HISTORY: HISTORICAL PERSPECTIVE
- HRS 1017 - INTRODUCTION TO EPIDEMIOLOGY
- PS 0550 - INTRODUCTION TO GLOBAL STUDIES
- ECON 0220 - INTRO TO HEALTH ECONOMICS
- ANTH 1761 - PATIENTS AND HEALERS: MEDICAL ANTHROPOLOGY 1

- SOC 0473 - SOCIOLOGY OF GLOBALIZATION AND HEALTH
- STAT 0800 - STATISTICS IN THE MODERN WORLD

Global Health Electives

Students can further personalize their course of study through electives offered by departments and schools across campus (9 credits total), including additional courses from the "core" list. A comprehensive list of courses is available prior to registration each term here. Students may also receive credit through their home department for related field visits, internships, community-based research, and other experiential learning as well as 1-credit "pop up" courses. Students should consult the advisor about these options.

Capstone

Students create a dynamic portfolio that curates and narrates their global health education and co-curricular experiences for external audiences.

Global Studies Certificate

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http://www.ucis.pitt.edu/global/

Global studies is an exciting - and evolving - interdisciplinary field concerned with transnational structures, processes, and interactions that cross familiar political borders and cultural boundaries and affect our social, economic, cultural, political, and ecological environments.

Global Studies students pursing an undergraduate degree in any school within the University can tailor a unique plan of interdisciplinary study drawn from more than 200 courses across 5 global concentrations, gaining a solid understanding of the academic debates over globalization and their policy implications, learn important critical thinking skills and use them to arrive at their own stances on these issues. Students can double count up to six credits from their major, allowing them to fulfill their general education, major or certificate requirements at the same time and must maintain a 2.50 cumulative GPA.

In addition to the certificate, the Center provides a hub for students wanting to understand and take action on today's pressing issues at home and/or abroad. It offers numerous complementary programs and opportunities that support students' intellectual and personal development: research skills, career exploration and career readiness, experiential education and civic engagement, and a critical understanding of current events. Also, funding is available for travel grants and tuition remission for student ambassador positions.

Certificate Requirements

- **Global Concentrations**: Working with the advisor, students personalize a course of study selecting from one of five global concentrations:

Cultural Dynamics
Ecology and Sustainability
Health and Well-Being
Peace, Conflict, and Security
Politics and Economy

- **Introduction to Global Studies (3 credits):** PS 0550 Introduction to Global Studies examines current global trends and issues in ways that encourage students to think critically about how to analyze, interpret, and respond to global interactions and their consequences for different regions, localities, and groups. It gives particular attention to the concept of globalization, highlighting the controversies surrounding its use and engaging core debates about the impact of global and transnational processes on economic and social relations, politics and governance, cultural interactions and the environment in local and global contexts.
- **Five Global Thematic Courses (15 credits):** After students select a global concentration, they choose from a comprehensive and dynamic list of courses ensuring three disciplines are represented to provide an interdisciplinary perspective on their chosen global concentration. At least two of the courses must be 1000 level. Students must maintain a 2.50 cumulative G.P.A.

- **Language Proficiency:** Building on Pitt's vast offering of over 30 languages, a minimum of two years of college-level study (four semesters) in a foreign language is required. Students can fulfill this requirement by passing a proficiency exam at the Intermediate low-mid proficiency level.
- **E-Portfolio:** Students create a dynamic portfolio that reflects their scholarly engagement within their global concentration or their understanding of a global issue, highlights how they are informed about, as well as engaged with, a global issue through their various co-curricular experiences at Pitt, and lastly highlights their professional development experiences preparing them for career success.

Special Academic Opportunities

Students enrolled in Global Studies are the first to be informed about funding for research, travel, language study, and study abroad; internships and career development; networking opportunities with dignitaries, academics, and professionals; and interesting events on campus and in the city of Pittsburgh.

Study Abroad: participation in any study abroad experience is highly encouraged but not required for a Global Studies certificate.

Latin American Studies Certificate and Related Concentration

University of Pittsburgh
University Center for International Studies
Center for Latin American Studies
Luis G. Van Fossen Bravo, Undergraduate Advisor
4207 Wesley W. Posvar Hall
Pittsburgh, PA 15260
412-648-7393
bravo@pitt.edu
www.ucis.pitt.edu/clas

Any undergraduate student at the University of Pittsburgh may enroll in the **Certificate or Related Concentration** of the Center for Latin American Studies (CLAS). The earlier you enter the program, the easier it is to incorporate Latin American courses into your plan of study. As a CLAS student, you will become eligible for grants and fellowships awarded by the Center. You also receive information about the many events sponsored by the Center.

Certificate Requirements

- **Seven Latin American courses** (21 credits): two courses in the major department and five courses from at least two departments outside the major. If majoring in a department in which no Latin American courses are offered, the requirement is seven Latin American area courses in at least three different departments. For a list of approved courses, click here.
- **Language proficiency**: three years (six terms) of college-level Spanish or Portuguese, or have equivalent competency
- **Study abroad in Latin America is required**. The study abroad program must be for academic credit and last at least four weeks. *The requirement may be fulfilled by participation in the CLAS Undergraduate Seminar and Field Program.*
- **Digital Portfolio**: Students will develop a brief digital portfolio where they can reflect on their studies, explain the connection between the classes used to complete the requirements, and present examples of their work. Students may include papers
- **GPA requirement** is 2.5 for all courses to be counted toward any Latin American Studies Certificate.

Related Concentration Requirements

Similar to a minor, the related concentration is designed for students who want to learn about the cultures and societies of our neighbors to the south. It is suitable for students considering a career specializing in the Latin American region, and has two academic requirements: area studies courses and language proficiency.

- **One course in the major** department, and **four courses** from at least two departments outside the major (15 credits). If majoring in a department in which no Latin American courses are offered, the requirement is five Latin American area courses in at least three different departments.
- **Language proficiency**: two years of study (four terms) of college-level Spanish or Portuguese, or have equivalent proficiency.
- **Digital Portfolio**: Students will develop a brief digital portfolio where they can reflect on their studies, explain the connection between the classes used to complete the requirements, and present examples of their work. Students may include papers.
- **GPA requirement** is 2.5 for all courses to be counted toward any Latin American Studies Related Concentration.

Special Academic Opportunities

The Center for Latin American Studies (CLAS) offers a variety of funding opportunities for undergraduate students entering or currently enrolled in one of its undergraduate programs. Please visit: www.ucis.pitt.edu/clas/ugrad_funding.

Russian, East European, and Eurasian Studies Certificate

Center for Russian, East European, and Eurasian Studies
4215 Wesley W. Posvar Hall
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reesadv@pitt.edu
http://www.ucis.pitt.edu/crees/

Deepen your understanding of a world region that spans Europe and Asia, where shifting identities and political boundaries are complicated by control of energy resources, EU/NATO affiliations, and the Cold War legacy. The Certificate in Russian, East European and Eurasian Studies is an interdisciplinary credential that appears on your transcript and complements your major and minor. The undergraduate Certificate in Russia, East European, and Eurasian Studies is crafted to allow students in any major - from STEM and professional disciplines to languages and other liberal arts - to enhance their program of study without extra tuition cost and usually with no increase in their overall course load. The certificate integrates language study with the study of the region where the language is spoken.

Certificate Requirements

- **Coursework:** Five Russian, East European, and/or Eurasian area studies (non-language*) courses (15 credits). Courses must be taken in at least three departments, and up to two courses may overlap with the student's major. Students must maintain a minimum 3.0 GPA in REEES-related courses.
- **Language proficiency:** a minimum of two years (four terms) of college-level study of a language of the former Soviet Union or East-Central Europe. Pitt offers Russian, Polish, Slovak, Hungarian, Ukrainian, Modern Greek, Turkish, Persian and Bosnian/Croatian/Serbian. Additionally, Pitt's Summer Language Institute offers Bulgarian and Czech. Heritage speakers must demonstrate intermediate-level proficiency.
- **Capstone Paper:** The capstone paper is the culmination of the student's learning experience and demonstrates in-depth, interdisciplinary knowledge of Russian, East European, and Eurasian studies. This 10-plus-page paper should be written ideally in the student's 3rd or 4th year and must be submitted to the certificate advisor with grade documentation (B or higher) prior to graduation. It will also include a cover essay in which the student will reflect on how his/her academic career has been influenced by REEES coursework, and how that coursework has contributed to the creation of the Capstone. Students are strongly encouraged to take the 3-credit REEES Capstone Seminar, usually offered in the Spring semester, which fulfills this requirement and counts as an area studies course.

**Students may apply advanced language coursework as Area Studies coursework in certain circumstances, in consultation with the certificate advisor.*

Related Concentration in European & Eurasian Studies

The Related Concentration in European & Eurasian Studies is crafted to offer comparative study opportunities for students in a pre-professional field - pre-medicine, pre-law, business, engineering, and health and rehab sciences - will while capitalizing on existing European language credits. This individualized, interdisciplinary credential provides a context for studying abroad and complements most academic plans and majors. For the Related Concentration, we define Eurasia as the Russian Federation, Turkey, Mongolia, and the former Soviet republics.

Requirements

- A **minimum of four** (12 credits) **content courses** is required. The courses must come from at least two different departments and none of the courses can overlap with a student's other credentials. These courses are allowed to overlap, however, with general education requirements. Students must earn a C or better in classes counting towards the certificate.
- **Language proficiency**: one year (two semesters) of college-level study of an official European (excluding English) or Eurasian language, or demonstration of equivalent proficiency. The same language classes (or AP credits) used to fulfill the general education requirement may be used here as well.

Special Academic Opportunities

Pitt offers a range of study abroad course that can be used to fulfill certificate requirements. Short-term summer study abroad courses, taught in English and offering 3 to 6 Pitt credits, may include:

- Czech Republic and Poland: Economy and Policy (ECON 0905) in Prague, Budapest, and Krakow, May;
- Romani (Gypsy) Music, Culture, and Human Rights (MUSIC 1362 , URBNST 1901) in Prague and Budapest, 6 credits, May-June;

- Architecture and the City in Central Europe (ARC 1191) in Vienna, Zagreb, Ljubljana, and Prague, May;
- Competing Perspectives on Global Energy (PS 1301) in Ukraine, Belgium, Pennsylvania, and Washington, DC, 3 credits, May;
- Monsters, Madmen, and the Modern City (ENGLIT 0636 , ENGLIT 0612) in Prague, 6 credits, July-August.

The intensive Summer Language Institute (SLI) is a great option to study languages of our region. Study abroad options are available for Russian, Bosnian/Croatian/Serbian (BCS), Bulgarian, Czech, Hungarian, Polish, Slovak and Persian (www.sli.pitt.edu).

**For those students interested in pursuing graduate or other advanced regional studies, a Bachelor of Philosophy degree in International and Area Studies/Russian, East European, and Eurasian Studies Track is also available.*

Transatlantic Studies Certificate

University of Pittsburgh
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slund@pitt.edu
http://www.ucis.pitt.edu/esc/

The Certificate in Transatlantic Studies allows students to pursue a comparative study of Europe and the United States, as well as countries that touch the Atlantic. Primary areas of study include governance, policy and security issues in the context of the transatlantic relationship, the history of colonialism, humanities and culture, and the comparative study of various professional fields such as business and medicine.

Certificate Requirements

- A **minimum of five** (15 credits) **Transatlantic Studies content courses** is required. Two of the courses may overlap with the student's major or other credentials. The remaining courses must be from at least two departments outside the student's major. Two of the courses must be at the 1000 level and students must earn a C or better in classes counting towards the certificate. Courses chosen must be thematically relevant to each other, and students may study any aspect of European and American history and culture of interest to them. Examples include film studies, health and science policy, architecture, politics, economics, and immigration.
- For a full list of approved courses, click here.
- **Language proficiency**: two years (four semesters) of college-level study of an official European language (excluding English). Languages currently available include: Spanish, German, French, Italian, Swedish, Modern Greek, Irish Gaelic, Portuguese, Hungarian, Polish and Slovak. Students may request placement tests through the language department.
- **Digital Portfolio:** This is the culmination of the student's learning experience and demonstrates in-depth knowledge of the West European studies theme the student has chosen. Details will be discussed with the advisor.

Special Academic Opportunities

In addition to the certificate itself, the European Studies Center also offers its students a number of valuable resources, including scholarships for study abroad, directed research opportunities, research assistance, and a full calendar of events and visits from politicians and practitioners from across Europe.

West European Studies Certificate

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http://www.ucis.pitt.edu/esc/

The Certificate in Western European Studies provides students with strong interests in predominantly Western European history, culture, politics, and languages to complement their major with a regional specialization. The certificate is self-designed, and students may choose any theme to organize

their studies and class choices. Examples of possible themes include country specific ones, such as Spanish Studies and British Studies, policy driven ones such as Intelligence & Security or Social Policy, and culture and history-based ones such as Ancient Greece & Rome or European Art & Architecture.

Certificate Requirements

- A minimum of **five West European studies courses** (15 credits). Courses must be chosen according to a theme to ensure intellectual cohesion.
- Two courses from the major may overlap with the certificate. Remaining courses must be from at least two departments outside the major.
- For a full list of approved courses, click here.
- **Language proficiency**: two years of college-level study (four terms) in French, German, Spanish, Portuguese, Italian, Irish Gaelic, Swedish or Modern Greek.
- **Digital Portfolio:** This is the culmination of the student's learning experience and demonstrates in-depth knowledge of the West European studies theme the student has chosen. Details will be discussed with the advisor.

Special Academic Opportunities

In addition to the certificate itself, the European Studies Center also offers its students a number of valuable resources, including scholarships for study abroad, directed research opportunities, research assistance, and a full calendar of events and visits from politicians and practitioners from across Europe.

University Honors College

The University Honors College (UHC) seeks to create opportunities for dedicated and engaged students to explore their interests in great depth and with great rigor. The UHC offers a variety of carefully designed courses from the humanities, social sciences, and natural sciences, along with supplemental advising opportunities, academic activities, and a distinctive baccalaureate degree in any undergraduate school of the University.

Contact Information

University of Pittsburgh
University Honors College
3600 Cathedral of Learning
Pittsburgh, PA 15260
412-624-6880
www.honorscollege.pitt.edu

Admission Requirements

A distinctive feature of the University Honors College (UHC) is that unlike honors programs and colleges at virtually all other universities, students do not apply for membership, students are not accepted into the UHC, and students are not rejected for membership. Rather, all undergraduate students who seek an enriched education are invited to pursue the rigorous academic opportunities provided by the UHC.

Advising

The UHC offers multiple forms for advising that are intended to complement the advising students receive from their primary advisor. These include supplemental academic advising, Health Professions Advising, national scholarships advising, community engagement advising, and Politics and Philosophy major advising.

Please note that all students are welcome to meet with UHC advisors and are encouraged to either make an appointment online or simply email the relevant advisor.

Supplemental Academic Advising

UHC supplemental academic advisors help students explore interests and goals, assist in matching them to relevant opportunities in research, student groups, and academics within the UHC and at Pitt; assist in planning double majors and/or an interdisciplinary approach to their education; provide general academic advice on courses, majors, and research; and aid in the preparation of personal statements for scholarships and graduate study. For more information: http://www.honorscollege.pitt.edu/advising

Health Professions Advising

Health professions advising assists students as they explore major choices, course selection, long range planning, and successful application to both the health professions committee and to medical, dental, optometry, podiatry, and veterinary schools. Advisors assess student goals and then recommend academic and experiential opportunities that mesh with student interests. For more information: http://www.honorscollege.pitt.edu/health-professions-advising

National Scholarships

The office of National Scholarships works closely with students to identify scholarships relevant to their academic and personal goals, and explore the steps to become competitive applicants for these awards. National scholarship advising can help students attain a broader perspective and refined understanding of their personal, academic, and professional goals; strengthen their writing skills through the creation and revision of personal statements and grant proposals; and develop the resourcefulness to identify opportunities to conduct meaningful research and/or incorporate service and international experiences into their educational plan. For more information: http://www.honorscollege.pitt.edu/national-scholarships-advising

Community Engagement

Community Engagement Advising and programming provides students with opportunities to use their academic interests and skills to positively impact their communities. Community Engagement Advising introduces students to pertinent social issues in the city of Pittsburgh as well as key organizations, leaders, and advocates who are involved with those issues; connects students to research, fellowships, experiential learning opportunities, and other scholarly projects that relate to public service and social change; supports students in designing independent experiences and research projects that integrate academic skills and interests with investigating and addressing community issues. For more information: http://www.honorscollege.pitt.edu/community-engagement-advising

Politics and Philosophy Major

This interdisciplinary major in the Kenneth P. Dietrich School of Arts and Sciences is advised through the UHC and provides students with training in the conceptual, empirical, and normative foundations of various fields of public policy. It enhances understanding of the moral and political complexities of public life and offers preparation in both theory and practice to students interested in pursuing careers in social and public affairs. For more information: http://www.honorscollege.pitt.edu/politics-philosophy

The Bachelor of Philosophy Degree

The Bachelor of Philosophy (BPhil) degree is jointly awarded by the UHC and any undergraduate school/college at Pitt. The BPhil degree signifies the highest level of research/scholarship attainable by an undergraduate student. To receive the BPhil degree, students must fulfill the degree requirements (major, general education, and/or other curricular requirements) of their "home school" (e.g., Kenneth P. Dietrich School of Arts and Sciences, Swanson School of Engineering, College of Business Administration, School of Nursing, etc.) and maintain a 3.50 cumulative GPA. The UHC adds two requirements: a more demanding program of study which should have breadth, depth, and focus and independent research/scholarship under the guidance of a faculty member culminating in a written thesis that is defended before a faculty examination committee that includes a visiting external examiner from another college or university. For more information: http://www.honorscollege.pitt.edu/bphil-degree

Honors Distinction

Requirements

The requirements for completion of the Honors Distinction will be:

- 9 academic credits of UHC approved courses (can include credits within approved school-based honors programs) - these will be identified by the University Honors Course attribute in PeopleSoft
- 3 experiential credits (can include research, independent study, approved study abroad via Panther Programs, approved internship for credit, approved co-op program) - these will be identified by the High Impact Practices attribute in PeopleSoft
- Completion of the Pitt Honors OCC (non-credit) - these will be identified by the catalog of opportunities entries in Suitable
- Completion of an approved capstone experience (if not completed as an Experiential/High-Impact Practice and/or required experiential credit)

Tracking

Students interested in completing the Honors Distinction will declare their intention to pursue the Honors Distinction by completing an online application form that will be reviewed and approved by the Assistant Dean of the Honors College. Upon approval, a Plan will be generated in PeopleSoft which will allow students to track their own progress. Students can apply for the honors distinction at any time during their academic experience, however that last deadline to submit their intention to pursue the Honors Distinction will be the end of add/drop period of the semester prior to which in which they will graduate.

Additional Information

Students admitted to the University of Pittsburgh prior to fall 2019 have been able to complete the UHC Scholar Transcript Designation

Special Academic Opportunities

Student Publications

The UHC advises and directs the publishing of four undergraduate publications: Collision (prose and poetry), Pittsburgh Undergraduate Review (analytical and scholarly essays), Three Rivers Review (literary magazine), Pitt Political Review (political writing). All publications are student run and always interested in new members. Consult the UHC publications page for more information: http://www.honorscollege.pitt.edu/activities/student-publications

Research Opportunities

The UHC provides research opportunities in the fall and spring semesters as well as the summer. These include the Brackenridge Research Fellowships, Health Sciences Summer Research Fellowships, and Chancellor's Undergraduate Research Fellowships just to name a few. For more in depth information about these programs and their application deadlines, please visit: http://www.honorscollege.pitt.edu/fall-and-spring-research-opportunities and http://www.honorscollege.pitt.edu/summer-research-opportunities

Housing

The UHC offers First-Year Honors Housing, located in Sutherland West, and Upper-Class Honors Housing in Pennsylvania Hall and Forbes Craig Apartments. Honors Housing is unique in that it connects highly motivated students from across schools and majors in communities that are shaped by their shared academic, cultural, and personal interests. To learn more about Honors Housing, visit: http://www.honorscollege.pitt.edu/housing

Major and Minor Descriptions

University Honors College

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Major and Minor Descriptions

Major

Politics and Philosophy, BA

The politics and philosophy major, a major in the Kenneth P. Dietrich School of Arts and Sciences, advised through the University Honors College, provides students with interdisciplinary training in the conceptual, empirical, and normative foundations of various fields of public policy. It enhances students' understanding of the moral and political complexities of public life and it offers preparation in both theory and practice to students interested in pursuing careers in social and public affairs.

By combining course work from different disciplines -- political science, philosophy, and economics -- the program's scope is broad, yet the structure of the curriculum also requires depth. The thematic nature of the major allows for flexibility in course selection. In collaboration with the major advisor, students design a cohesive program of study tailored to meet their individual post-graduate/career interests and needs.

The politics and philosophy major is a rigorous, but rewarding, program. Upon graduation, an academic career is certainly a possible pursuit; the major also provides excellent preparation for careers in law, government, community organizations, and social action groups.

The major is comprised of elements from the political science, philosophy, and economics departments and involves a minimum of 51 credits distributed as follows: political science - 21 credits; philosophy - 21 credits; economics - 9 credits. A capstone, which may have associated credits, is also required.

Required Courses

Political Science Courses

Students must complete seven courses in political science. At least four of those courses must be upper level (numbered 1000 or above). One of the courses must be a W-course; the W-course may be either upper- or lower-level.

Philosophy Courses

Students must complete seven courses in philosophy. At least four of those courses must be upper level (numbered 1000 or above). One of the courses must be a W-course; the W-course may be either upper- or lower-level.

Co-Requisite Courses

Economics Courses

- ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY
- ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY
- ECON XXXX any course (no course in the 0800 series may count toward this requirement)

Capstone Requirement

In consultation with the major advisor, students may complete one of the following requirements to graduate with honors in the major.

- complete the Bachelor of Philosophy thesis through the University Honors College (UHC);
- participate in a graduate-level seminar (with permission from the instructor); or
- complete a Directed Research Project, an Independent Study, or an Internship.

Other requirements and conditions

Grade requirements

A minimum GPA of 2.0 is required in those courses that count toward the major.

Satisfactory/No Credit grade option

There is no limit on the number of courses in the major that can be taken on an S/NC basis, but it is suggested that these courses be taken for a letter grade.

Writing (W) requirement

The W courses listed under the political science and philosophy requirements satisfy the W requirement for the major.

Joint Major

University Honors Joint Degree Program

Completion of the UHC program would require 24 academic credits to be completed upon graduation. Of these 24 credits, a minimum of 18 academic credits of UHC approved honors courses that would include courses within approved school-based honors programs are required. A required minimum of 6 experiential credits that include academic research, independent study, approved study abroad via Pitt Panther programs, approved internship for credit, or approved Coop Program for academic credit. Approved experiential courses as part of approved school-based honors programs would also qualify. In addition to the curricular requirements, students would be required to complete the honors-specific Outside of the Classroom Curriculum that includes enhanced experiences for honors students that are not for academic credits. Minimum GPA of 3.25 is required for completed of the honors program upon graduation. Upon completion, students will receive their degree issued jointly from their academic unit and the honors college with "Honors" designated on the diploma. Students admitted to the honors college for the freshman year will be granted priority access to the honors living learning community with the residence hall. Honors students in good academic standing within the program will also be granted priority registration throughout their time as undergraduate students.

Admissions Requirements

The admissions process includes criteria for three categories of students: freshman admits, internal (Pitt) transfers and external transfers.

- The criteria for freshman admissions include: evaluation of two well-thought-out and creatively written essays; evaluation of extra-curricular activities;
- The criteria for external transfer admissions include: University admissions, completion of a minimum of two college semesters (24 credits) that meet the University of Pittsburgh criteria for transfer to credits, completion of intellectual curiosity and public good essay questions;
- The criteria for internal transfer (current Pitt students in all campuses) admissions include: Current Pitt transcript with minimum GPA of 3.50, completion of two semesters (24 credits), evaluation of intellectual curiosity and public good essay questions and one academic letter of recommendation from an instructor or academic advisor.

Total Credits: 24

Special Academic Opportunities

The University of Pittsburgh makes many special academic opportunities available to all of the University's undergraduate students. These opportunities provide students with ways to augment their education and experience with expanded study programs both on campus and off campus, in both University and professional settings.

Area of Concentration (Sub-Plan)

An area of concentration is an approved educational experience that results in concentrated training in or knowledge of a particular area within the discipline of a degree program. For more information about specific areas of concentration, see individual school sections.

Certificate Programs

Students may broaden their educational experience by electing to take an academic interdisciplinary certificate program in the areas listed below. The certificate may partially fulfill the degree requirements of the student's school. The requirements for each certificate vary, and students should contact the certificate program director. For more information about these certificate programs, see their individual listings in the school or center section identified in parentheses.

- Accounting (CGS)
- African Studies (UCIS)
- American Sign Language (A&S)
- Asian Studies (UCIS)
- Assistive Technology in Rehabilitation (SHRS)
- Children's Literature (A&S)
- Civil Engineering and Architectural Studies (ENGR)
- Communications (CGS)
- Community Health Assessment (CGS)
- Conceptual Foundations of Medicine (A&S)
- Corporate/Community Relations (CGS)
- Dental Hygiene (DEN)
- Digital Media (CGS)
- Emergency Medicine in Rehabilitation (SHRS)
- English Writing (CGS)
- European Union Studies (UCIS)
- Fessenden Honors Engineering (ENGR)
- Gender, Sexuality, and Women's Studies (A&S) (CGS)
- Geographic Information Systems (A&S)
- German Language (A&S)
- Global Studies (UCIS)
- Historic Preservation (A&S)
- History and Philosophy of Science (A&S)
- Information System Design (CGS)
- International Business (CBA)
- International Engineering Studies (ENGR)
- Jewish Studies (A&S)
- Latin American Studies (UCIS)
- Leadership (A&S)
- Leadership and Ethics (CBA)
- Managing Health Services Programs and Projects (CGS)
- Medieval and Renaissance Studies (A&S)
- National Preparedness and Homeland Security (CGS)
- Nonprofit Management (CGS)
- Nuclear Engineering (ENGR)
- Pathokinesiology in Rehabilitation (SHRS)
- Photonics (A&S)
- Product Realization (ENGR)

- Psycho-Social Issues in Rehabilitation (SHRS)
- Public and Professional Writing (A&S)
- Russian and East European Studies (UCIS)
- Sustainable Engineering (ENGR)
- West European Studies (UCIS)
- Writing for the Professions (CGS)

Abbreviations are as follows:

A&S = Arts and Sciences
CBA = College of Business Administration
DEN = School of Dental Medicine
CGS = College of General Studies
ENGR = Swanson School of Engineering
UCIS = University Center for International Studies

Cooperative Programs

The University has established some arrangements with industry that permit students to rotate four-month terms between the workplace and the classroom. These programs are administered by the Swanson School of Engineering and available to engineering, computer science, and engineering technology students. The experience normally starts in the sophomore or junior year. Call 412-624-9826 for more information or see www.engineering.pitt.edu/coop.

Cross Registration

Cross-college and cross-university registration is a program designed to provide enriched educational opportunities for undergraduates in any of the following participating Pittsburgh-area institutions: Carlow University, Carnegie Mellon University, Chatham University, Community College of Allegheny County, Duquesne University, La Roche College, Pittsburgh Theological Seminary, Point Park University, Robert Morris University, and the University of Pittsburgh. For requirements and limitations, see the Cross-Registration section of this catalog or visit www.pchepa.org.

Double And Joint Degrees

Students may simultaneously pursue more than one undergraduate degree (e.g., a BA and a BS within Arts and Sciences, or an undergraduate degree in the Swanson School of Engineering and in Arts and Sciences). Students must be admitted to both schools offering the degrees and fulfill the degree requirements of both schools. For the double degree (whether within or between schools), the student must complete not only the requirements for both degrees, but also a minimum of 30 credits beyond what is normally required for the primary degree (e.g., a student earning two A&S degrees would need at least 150 credits, rather than the usual 120; a student earning an A&S degree as the primary degree and a degree from another University of Pittsburgh school as the secondary degree would need at least 150 credits). Students must maintain a 2.00 GPA in all courses. Check with the individual school for other specific requirements that apply.

Graduate And Professional School Opportunities

Graduate school provides students with the opportunity to enhance their knowledge and qualifications in areas of academic and professional interest. All students can take advantage of being at a major research and graduate institution by exploring the many possibilities for graduate study that exist at the University. For information about specific programs, see the Graduate and Professional Studies Catalog.

University of Pittsburgh undergraduate students with sufficient preparation are permitted to enroll in certain graduate courses at the University following procedures determined by each school. The graduate credits earned may be counted toward the undergraduate degree if approved by the student's school. These may not be counted as credits toward a graduate degree except as noted below.

Undergraduate students who need fewer than 15 credits to complete requirements for the baccalaureate degree and who intend to continue study toward an advanced degree may be permitted during their final term to register for graduate courses that will later apply toward a graduate degree. See the *Graduate Catalog - Academic Regulations* section "Enrollment in Graduate Courses as an Undergraduate".

Some schools offer accelerated admission into certain graduate and professional schools through a combined program leading to both a bachelor's and graduate or professional degree. The participating undergraduate schools and their early admissions graduate school partners are listed below:

- Arts and Sciences (A&S)-Communication Science Program (speech, pathology, and audiology) within the School of Health and Rehabilitation Sciences (SHRS)

- A&S-Physical Therapy Program within SHRS
- A&S-School of Dental Medicine
- BS in Computer Science and MA or MS in Computer Science, both from Arts and Sciences
- BS in Statistics and MA or MS in Statistics, both from Arts and Sciences
- BA from Arts and Sciences and JD from Law
- BA or BS (unspecified major, but prerequisites required) from Pitt and MS or MPH in Environmental and Occupational Health, MS or MPH in Infectious Diseases and Microbiology, MS in Human Genetics, MS or MPH in Biostatistics, or BCHS or MHPE in Health services Administration from Graduate School of Public Health
- School of Nursing-RN-Option Program (RN-MSN option)
- SHRS-Health Information Management Program
- BA in Legal Studies from the College of General Studies and Masters of Law from Law
- BSBA from College of Business Administration and JD from Law

Honors College And Honors Courses

The University Honors College (UHC) seeks to meet the special academic and cocurricular needs of the University's most able and motivated undergraduate students. The University Honors College offers a variety of carefully designed courses from the humanities, social sciences, and natural sciences, along with special advising opportunities for an academic community of motivated students, and a special baccalaureate degree in any undergraduate school of the University. See the University Honors College section of this catalog for more information. In addition, some schools and departments offer an honors major. Students should see their school for more information on this opportunity.

Internships

Some schools provide internship experiences appropriate to the student's academic discipline. An internship is a supervised, work-related experience, either on a volunteer or compensated basis. It is intended to be a new experience, not an existing position in which the student is already working. Students will only get internship credit for a current employment situation that has been pre-approved as an internship by the relevant school or department.

Minors (Plans)

A minor provides an option for a student obtaining a degree in a particular discipline to attain knowledge of another discipline. Students may earn minors in schools other than the school in which they are enrolled. After the student lists the official minor on his or her graduation application, the minor appears on the student's academic record and official transcript when the degree is awarded. (See the Academic Programs section of this catalog for available minors.)

Reserve Officer Training Corps (ROTC)

ROTC is an educational program designed to provide full-time students an opportunity to become military officers while completing a Bachelor's or a graduate degree. Students may elect to participate in either the Air Force or Army ROTC program at the University of Pittsburgh or the Naval ROTC program at Carnegie Mellon University. Students in the Air Force program have the option of completing a two or a four-year program. Students in the Army ROTC Program and Naval ROTC programs have the option of completing a two, three, or four-year program. Completion of the Air Force ROTC program leads to a commission as a Second Lieutenant in the U.S. Air Force. Completion of the Army ROTC program leads to a commission as a Second Lieutenant in the U.S. Army, the Army National Guard, or the U.S. Army Reserve. Completion of the Navy ROTC program leads to a commission as an Officer in the Navy or Marine Corps. All three programs offer monthly stipends, a book allance and tuition scholarships. Call 412-624-6396 or see http://www.afrotc.pitt.edu/ for more information on the Air Force ROTC program, 412-624-6197 or see www.rotc.pitt.edu for more information on the Army ROTC program, and 412-268-5109 or http://www.cmu.edu/nrotc for more information on the Navy ROTC program.

Study Abroad

Students are encouraged to add an international dimension to their undergraduate education through study abroad. Programs of study exist in almost every corner of the world and will fulfill requirements for almost any field of study. Second language proficiency is not a requirement, as most programs offer courses taught in English. Financial aid and scholarships are available. Interested students should come to the Study Abroad Office in 802 William Pitt Union to discover their many options. Call 412-648-7413 to schedule an Essentials of Study Abroad Session or explore www.abroad.pitt.edu. The Engineering Study Abroad Office is in B-80G Benedum, and the College of Business Administration Study Abroad Office is in 2514 Sennott Square.

Summer Sessions

The University offers a large selection of courses in a variety of compressed sessions throughout the summer. Current students can register through their school. Several summer sessions are offered, see the Academic Calendar.

During the summer term and summer sessions, most students are charged tuition on a per-credit basis regardless of the number of credits taken. See Financial Information. Additional information is available through the Office of University Summer Sessions at 412-383-8600 or www.summer.pitt.edu.

Summer Edge

The University offers intensive summer programs that provide academic and experiential studies delivered in a small cohort. In summer 2017, these programs are the Edge in Public and Global Health and the Edge in Wyoming. All University of Pittsburgh undergraduate students are eligible to apply. A transcript notation stating completion of the specific program will appear on the student's transcript. For more information including program costs, see http://www.summeredge.pitt.edu/.

In the Edge in Public and Global Health (11-12 credits), students learn to analyze and tackle critical world health problems through the integrated application of biological, social, and quantitative sciences. Working individually or in pairs with Public Health faculty, students will have opportunities to experience laboratory, quantitative, policy, or social science research, or field work with community organizations or health agencies. The program is administered through the School of Public Health and is offered over the 12-week summer session.

In the Edge in Wyoming (6 credits), students explore the history and politics of the American West, including issues related to environmental policy. While at the University of Wyoming, students will experience the West and its culture by interacting with local guest speakers and visiting relevant, regional sites. The program is administered through the Dietrich School of Arts and Sciences and is offered during 4-week-2 summer session at the University of Wyoming.

Course Information

Please note, when searching courses by Catalog Number, an asterisk (*) can be used to return mass results. For instance a Catalog Number search of " 1 " can be entered, returning all 1000-level courses.*

Admin and Policy Studies

ADMPS 1001 - SOCIAL FOUNDATIONS OF EDUCATION

Minimum Credits: 3
Maximum Credits: 3
Students in the course have the opportunity to develop a foundational understanding of the dynamics of schooling in society by addressing the cultural aspects that underlie society's educational ideas and practices. Through an interdisciplinary approach, readings and activities are designed for school practitioners, or those contemplating careers in education, to engage in the study of those cultural aspects and consequences. The general intent of foundational study is to introduce students to interpretive uses of knowledge Germane to education and to establish a basis for lifelong learning through normative and critical reflection on education within its historical philosophical, cultural and social contexts. Special emphasis is focused on the role of schooling in cultivating the habits necessary for democratic citizenship which include ongoing efforts to secure equitable and just social relations, and to advance the common good.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: African Studies

Administration of Justice

ADMJ 0100 - SOCIETY AND THE LAW

Minimum Credits: 3
Maximum Credits: 3
Every society regulates behavior and the means, i.e., either informal or formal, with which this is done varies according to level of social development. This course examines the regulation of behavior in primitive, transitional, and modern societies and traces the development of law and legal systems and their relationship to different characteristics of social development. We will examine legal jurisprudence and the application of the principles of these philosophies and explore how they have shaped legal action.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 0500 - INTRODUCTION TO ADMINISTRATION OF JUSTICE

Minimum Credits: 3
Maximum Credits: 3
Introductory course designed to provide the student with basic information on the criminal justice system. Views the criminal justice system as consisting of six sub-systems; police, prosecution, courts, corrections, probation and parole. Explores law and society in general, the history, structure, function and contemporary problems in each major sub-system. Also explores the trend of the criminal justice system and the directions and implications involved.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 0600 - INTRODUCTION TO CRIMINOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the study of the causes and social responses to crime. It examines legal definitions and elements of crime; surveys major categories of crime, i.e., Predatory and non-predatory acts; reviews major measures of crime; identifies major correlates and theories of crime; differentiates types of offenders and evaluates the working of the criminal justice system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1100 - CRIME SCENE INVESTIGATION

Minimum Credits: 3
Maximum Credits: 3
This course provides students with an overview of crime scene investigative issues and problems, as well as techniques used in the collection, preservation, analysis, and utilization of physical and testimonial evidence in criminal prosecutions. Topics include forensic photography, crime scene collection equipment, canvassing, and interrogation techniques in investigations of robbery, burglary, assault, and homicide crimes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1115 - CRIMINALISTICS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the scientific tools of analysis of crime scene evidence. Topics include toxicology, hair, fiber, blood, DNA, fingerprint, and firearms analysis, as well as cause of death issues such as sexual homicides, suicides, and assisted suicides, drug and carbon monoxide poisoning, accidental deaths, and blunt force trauma deaths. The class consists of integrated lecture and lab each week. The laboratory activities require only basic calculations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1118 - CRIMINALISTICS LAB

Minimum Credits: 1
Maximum Credits: 1
This is an optional lab for students enrolled in administration of justice 1115. Designed for non-science majors, the lab will introduce students to the basic principles of chemistry, biology, and physics as they are used on a daily basis in criminal investigations. Topics include: identification of hair and fibers, DNA, and chromatography. These and other techniques are then applied to a simulated drug bust, a kidnapping case, and a suicide/homicide investigation.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: ADMJ 1115

ADMJ 1200 - INTRODUCTION TO LAW ENFORCEMENT

Minimum Credits: 3
Maximum Credits: 3
Introduces various historical and philosophical approaches to law enforcement. Course explores origins of policing; philosophical positions on nature of law enforcement and its justification; comparisons of various types of policing in different historical epoch; and emergence of bureaucratized urban force. Topics include development of law enforcement from ancient times with emphasis on philosophical approaches to policing in U.S.; Introduction to constitutional issues and problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1205 - INTRODUCTION POLICE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the management of police organizations. Topics include the evolving community expectations, alternative organizational models, recruitment, training and education, performance evaluations, technology and communications, research and planning, internal and external police accountability, and police culture and ethics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ADMJ 1210 - JUVENILE DELINQUENCY

Minimum Credits: 3
Maximum Credits: 3
Provides an overview of the field of juvenile delinquency. Topics covered include theories and research on causes of juvenile delinquency; law enforcement practices encountered in attempts to control delinquency; juvenile treatment under law; correctional philosophy and practices in juvenile justice; and impacts of juvenile criminality upon the rest of society. Students emerge from the course with knowledge of causes, prevention, treatment, and control of juvenile delinquency and should be prepared to move into more detailed study of this subject.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ADMJ 1220 - DEVIANCE AND THE LAW

Minimum Credits: 3
Maximum Credits: 3
This course will examine the concept of deviant behavior and how departing from socially acceptable norms in legal, social and institutional settings sparks certain emotional reactions from those who encounter or experience it. The course will also, identify what is deviancy, types of deviant behavior, who engages in it, what causes it and how in certain circumstances it violates the law by considering the characteristics of the deviant person from both a socio-cultural and historical perspective. In addition, it will outline various theories to deviant behavior.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ADMJ 1225 - THE JUVENILE JUSTICE PROCESS

Minimum Credits: 3
Maximum Credits: 3
Presentation, discussion and analysis of the nature of the juvenile justice process, legal steps required in processing juveniles, nature and operation of juvenile justice institutions, interrelationships between parts of the system, and problems and prospects for their solution.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ADMJ 1230 - WHITE COLLAR CRIME

Minimum Credits: 3
Maximum Credits: 3
This course examines the meaning, varieties, and extent of "white collar crime" in America. It investigates the developmental history of this concept, theories of white collar crime causation, specific types of white collar crime, empirical and theoretical controversies surrounding white collar crime, and the probable future directions for this type of criminal behavior.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ADMJ 1234 - INTRODUCTION TO CYBERCRIME

Minimum Credits: 3
Maximum Credits: 3
Traditionally, crime has taken place in the physical world. Since the dawn of the internet, criminal activities on the web have been continually increasing. Crime is no longer restricted to a town, city, state or even country as the internet crime transcends all different types of jurisdictions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

ADMJ 1235 - ORGANIZED CRIME

Minimum Credits: 3
Maximum Credits: 3

This course is designed to examine the history of organized crime not only within the United States, but from an international perspective as well. The emergence of "non-traditional" groups which are competing for power and profits will be examined, as well as the alliances between various criminal groups that have evolved, resulting in the phenomenon of "transnational" organized crime. Those "non-traditional" groups include, but are not necessarily limited to, domestic and international terrorist organizations, the reasons for their development as well as the perceived risk to American citizens both in a domestic environment and abroad. Neither organized crime nor a terrorist organization can be effectively discussed without integrating the evolution of US drug policy, which will be included. Finally, the various government tactics implemented to counter the threats mentioned herein as well as the impact on the private sector will be integrated into lectures throughout the program.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

ADMJ 1236 - INTERNATIONAL ORGANIZED CRIME

Minimum Credits: 3
Maximum Credits: 3
Organized crime is no longer confined to a few countries such as Italy, the United States, and Japan. During the 1980s and 1990s it has become much more pervasive, and has had a major impact in countries in transition; turkey, Mexico, and South Africa. This course looks at the dynamics of organized crime, explains why it develops in particular countries, the various forms it takes, and the responses of law enforcement agencies and international institutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Asian Studies, Global Studies, Russian & East European Studies

ADMJ 1238 - CYBER SECURITY, LAW, AND MONEY LAUNDERING

Minimum Credits: 3
Maximum Credits: 3
This course will examine the scope of cyber-crime and its impact on today's system of criminal justice. Similarly, the vulnerabilities to cyber-assault will be examined. Topics include the use of computer technology to commit crimes such as "hacking" and other computer based criminology, as well as means of committing more traditional violations of law. Also included will be an analysis of the legal considerations facing law enforcement and other cyber-security professionals who are tasked with meeting the challenges of discovering, investigating and prosecuting cyber-crimes. Since our economy and security enterprises are so dependent on the electronic dissemination of information, effective measures to secure this vital resource will be explored. Given the fact that funds are transferred electronically, the electronic transmission of finances will be examined as well as the more basic methods of raising funds and laundering same to advance terrorist activities throughout the world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1242 - GENDER, RACE, CLASS, AND CRIME

Minimum Credits: 3
Maximum Credits: 3
Gender, race and class are overlapping categories of experience that affect all aspects of life. There is perhaps no other context in which the effects of gender, race and class are as acutely evident as in the criminal justice system. That is, the people who are processed through the criminal justice system are disproportionately male, nonwhite, and from the lower classes. This class is designed to examine the cumulative and interlocking effects of gender, race, and class on crime.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ADMJ 1245 - TERRORISM

Minimum Credits: 3
Maximum Credits: 3
This course focuses upon the social, political, economic and philosophical reasons for the development and spread of terrorism throughout the world, and examines potential dangers inherent in these practices and possible means of solutions to them. Special attention will be given each term to domestic and international acts of terror that affect American citizens, interests, and policies.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

ADMJ 1246 - FINANCING TERRORISM

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide the student with an understanding of how terrorists and insurgents fund their activities and finance their operations. The course analyzes the relationship between states and non-state actors, U.S. And international responses to terrorist financing, and anti-terror strategies. Selected topics include the political economy of terrorism financing, the 'HAWALA' system, various mechanisms and policy dilemmas associated with terrorism financing, warning indicators, and terrorist organizations' vulnerabilities and inefficiencies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1265 - ADVANCED TOPICS IN CRIMINOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is an advanced course that examines specific and controversial issues related to crime and the criminal justice system. While the exact topics change from year to year, those that have been studied include: the death penalty, mandatory sentencing, jail and prison overcrowding, victims' rights, and white collar crime.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1300 - INTRODUCTION TO CORRECTIONS

Minimum Credits: 3
Maximum Credits: 3
Introduces various historical and philosophical approaches to corrections. Course explores origins of correctional institutions and evolution of correctional practices in contemporary society. Emphasis on modifications of institutional practices in contemporary society and development of new strategies as alternatives to incarceration. Various methodologies applicable to homogeneous and heterogeneous population groupings of offenders are examined taking into account individual characteristics and differences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1350 - PROBATION AND PAROLE

Minimum Credits: 3
Maximum Credits: 3
Presents and evaluates the nature and impact of probation and parole, research on effects of both, and strategies for their most effective use. The course examines the nature of parole; factors affecting grant of denial or probation; structure and operation of probation services; differences between juvenile and adult probation services; and impacts of probation and parole upon both the criminal justice system and larger society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1400 - INTRODUCTION TO CRIMINAL LAW

Minimum Credits: 3
Maximum Credits: 3
Acquaints the student with basic principles of criminal law derived from our English common law heritage and from more recent statutory penal code revisions in the American states. Course examines the meaning of crime and of criminal complicity and conspiracy; sentencing alternatives; and the decriminalization of some crimes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1410 - INTRODUCTION TO CRIMINAL PROCEDURE

Minimum Credits: 3
Maximum Credits: 3
This course examines the procedural effects of criminal law, including constitutional rights, state criminal procedure, and appellate decisions and rules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ADMJ 1425 - PRINCIPLES OF HOMELAND SECURITY

Minimum Credits: 3
Maximum Credits: 3
This course examines the new problems facing our domestic public service and justice personnel -- the borderless world of globalization and technology. Attention is paid to problems of terrorism, incident management systems, violence incident response procedures, planning for violence, changing federal, state, and local roles and response planning, weapons of mass effects, mass casualty programs, crime scene operations, technology and emergency responses, the evolving role of the intelligence community, and government, private, and non-government security issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Urban Studies

ADMJ 1450 - CRITICAL ISSUES IN CRIMINAL JUSTICE

Minimum Credits: 3
Maximum Credits: 3
Analyzes contemporary issues relating to policies, goals, and procedures of all criminal justice agencies. Topics covered include trends and controversies regarding law enforcement activities, the changing role of police, police court controversies, standards and goals, future trends in criminal justice, manpower utilization, organizational changes, long-range planning, and projections for future of police agencies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ADMJ 1900 - PRESERVICE INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
This course is a supervised placement with specific agencies in the criminal justice system and is offered through the College of General Studies for student interns in the CGS Administration of Justice and Legal Studies majors and minors. Students enrolled in this internship engage in formal and reflective writing, journaling, and analysis about their work experience and how it relates to their academic and career pursuits. Class workshops and group discussions provide further opportunities for debriefing and consolidation of ideas and skills. This is a hybrid course with three in-person workshops and faculty authorization is required. Students must be registered for the internship course at the time they are completing the internship in order to earn credit.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

ADMJ 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Allows advanced students to pursue topics and research of special interest which are not otherwise available.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

Africana Studies

AFRCNA 0025 - YORUBA 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies

AFRCNA 0026 - YORUBA 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language. To recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 0031 - INTRODUCTION TO AFRICANA STUDIES

Minimum Credits: 3
Maximum Credits: 3
This is a survey course for Africana studies. An Afrocentric approach will be used to review the eight basic subject areas of the multidisciplinary focus; black history, black religion, black creative productions, black politics, black economics, black social organizations, black psychology and black education. Two alternative views will be pursued; a theoretical review of the literature and a summation of the practical experiences of black life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 0032 - YORUBA 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies

AFRCNA 0033 - YORUBA 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 0120 - AFRICAN AMERICAN EXPERIENCE SPORTS

Minimum Credits: 3
Maximum Credits: 3
This course examines blacks in sports. It focuses on sport as a microcosm of the larger society and also addresses sport's relationship to politics, economics, race relations, and South African apartheid. It looks at the history of blacks in sports as well as three aspects of sports that appear to be racially biased; position allocation, performance differentials, and rewards and authority structure.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement

AFRCNA 0127 - INTRODUCTION TO AFRICA

Minimum Credits: 3
Maximum Credits: 3
Multidisciplinary introduction to Africa emphasizing the richness, diversity and dynamism of the African experience and presented through lecture discussions of culture, social structure, history, economy, politics and other aspects of Africa's development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 0150 - AFRICAN AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Introduction to black American literature from its oral traditions to the written form from the 18th to 20th century interrelated to historical social and political movements. Special emphasis will be placed upon the Harlem Renaissance period, the literature of the 1960's, and a work by the Pulitzer Prize winners (Gwendolyn brooks, James Alan McPherson, Alice Walker, or Toni Morrison).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement

AFRCNA 0212 - WEST AFRICAN DANCE

Minimum Credits: 3
Maximum Credits: 3
To pursue at an introductory level specific ethnic dance forms of West Africa.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 0242 - AFRICANA URBAN WOMAN

Minimum Credits: 3
Maximum Credits: 3
Writings by African and Afro-American women writers reveal similar problems inherent in a move from a rural to an urban setting. A look at how the women characters adjust to loneliness, economic, educational, and cultural changes, and the quest for self-fulfillment is to be discussed within the context of the literary works.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., Urban Studies

AFRCNA 0311 - INTRODUCTION TO THE AFRICAN AMERICAN FAMILY

Minimum Credits: 3
Maximum Credits: 3

This course has 2 objectives: (1) it seeks to describe and analyze the organization of black families in American society and changes in them over time, and (2) it brings together the scholarly sources available to students of black families to assess the contribution each makes to a more theoretically and conceptually sophisticated description of the structure and interaction in black families.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

AFRCNA 0313 - THE BLACK CHURCH

Minimum Credits: 3
Maximum Credits: 3
An introduction to the course and historical development of the black church in America, its contribution to the social and religious progress of black people, black leadership, and struggles including the civil rights movement, black theology and other social movements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement

AFRCNA 0316 - INTRODUCTION AFRICAN AMERICAN THEATER

Minimum Credits: 3
Maximum Credits: 3
This course leads the student thru the social and historical development of black theater in North America from pre-Civil War to the present. It traces this development thru the writers, performers, companies, institutions and social movements which helped to shape the theater movements. The ultimate goal is to arrive at the understanding and appreciation that black theater is a testament to the life and vitality of a people.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement, Writing Requirement Course

AFRCNA 0318 - HISTORY OF AFRICA BEFORE 1800

Minimum Credits: 3
Maximum Credits: 3
Surveys history of Africa from earliest times to eve of European colonization. Looks at Africa from the inside out and aims at promoting an appreciation of Africa's contribution to world civilization and an understanding of the historical processes that have shaped modern Africa. Major themes and topics include the ancient kingdoms, Islam, the slave trade and the European contact.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 0352 - AFRICAN AMERICAN DANCE

Minimum Credits: 3
Maximum Credits: 3
An introduction to African-American dance influence of West Africa and the Caribbean upon the black American experience in a comparative and historical perspective. These two perspectives are based upon those devised by African-American dance artists, such as Katherine Dunham, Alvin Ailey and Bob Johnson. The physical component of African-American dance emphasizes body placement and the relationship of movement to its music.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 0385 - CARIBBEAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
Examines historical roots of modern Caribbean. Examines major historical developments from period of subjugation of indigenous population through era of slavery to rise of modern nationalism and impact of American intervention. Also analyzes related socioeconomic systems and institutions. Selected country case studies included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 0434 - PSYCHOLOGICAL EXPERIENCE AFRICAN AMERICAN FEMALE

Minimum Credits: 3
Maximum Credits: 3
The course examines black female behavior from both psych historical and contemporary perspectives. The model for classroom interaction consists of lecture and group discussions by presenting relevant information and/or conducting specific exercises.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement

AFRCNA 0454 - MAN/WOMAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Through prose and poetic works one will note how black men are viewed and characterized by female writers as well as how black women are treated by male writers. The basis for the difference lies in racial and sexual stereotyping in Afro-American literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

AFRCNA 0508 - SWAHILI LANGUAGE AND CULTURE IMMERSION

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies

AFRCNA 0517 - INTRODUCTION TO AFRICAN AMERICAN POETRY

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to an overview of the poetry by focusing on both male and female writers and their works that illuminate the Afro-American poetic tradition and those pivotal moments or transitions within the development of the tradition. The instructor recognizes that black female poetry especially, is a complex whole that can be analyzed in terms of style, structure and that it has a coherent history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

AFRCNA 0522 - INTRODUCTION TO AFRICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will use a comparative approach to modern African creative writing in three major European languages; English, French, and Portuguese; bringing together writers from east, West, South and North Africa.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 0523 - SWAHILI 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language. Its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies

AFRCNA 0524 - SWAHILI 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0501 or AFRCNA 0523 or SWAHIL 0101; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement

AFRCNA 0525 - SWAHILI 3

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0502 or AFRCNA 0524 or SWAHIL 0102; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies

AFRCNA 0526 - SWAHILI 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0503 or AFRCNA 0525 or SWAHIL 0103; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies

AFRCNA 0536 - 20TH CENTURY AFRICAN AMERICAN WOMAN HISTORY

Minimum Credits: 3
Maximum Credits: 3

Using both a chronological and topical format, this course will investigate the history, culture, and activism of African American women in the twentieth century through readings of historical texts and articles, autobiography, and oral testimony. The content of the course includes an exploration of the responses of African American women to racism, sexism, and class and color consciousness within different historical periods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 0586 - EARLY AFRICAN CIVILIZATIONS

Minimum Credits: 3
Maximum Credits: 3
The course surveys the emergence and growth of early African civilization from the beginnings of the evolution of the human race to the eve of the European colonization of the continent. It introduces students to the multiple disciplines contributing to knowledge about early Africa, and shows the centrality of Africa and Africans for humanity in general. Among the principal themes that the readings and discussions focus on are: pre-history of Africa and the genesis of humankind; the complexity of migration, and state formation; and African and European earlier contact. A fundamental approach will be to look at Africa from the inside out and to analyze African societies from the perspective of their internal development and reaction to external influences. Its basic goal is to promote, first, an appreciation of Africa's contributions to world civilization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 0628 - AFRO-LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
A survey of black history in the countries of Latin America, from the period of European conquest (c. 1500) To the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Geographic Region General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 0629 - AFRO-AMERICAN HISTORY 1

Minimum Credits: 3
Maximum Credits: 3
This course surveys the history of Afro-Americans from their African origins to their emancipation during the Civil War.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 0630 - AFRO-AMERICAN HISTORY 2

Minimum Credits: 3
Maximum Credits: 3
This course surveys the development of black Americans from the time of the Civil War to the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 0639 - HISTORY OF JAZZ

Minimum Credits: 3
Maximum Credits: 3
The course focuses on the chronological development of jazz from its beginnings on the plantation to its present state as a world concert music.

Various styles such as ragtime, blues, gospel, spirituals, rhythm and blues, rock, soul, etc., Are examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 0787 - BLACK CONSCIOUSNESS

Minimum Credits: 3
Maximum Credits: 3
Introduction to the growing body of coherent cultural ideas and beliefs which provide a positive framework for study and interpretation of the black experience in North America. The course is pan-African in scope and context. One of the goals is to enable the student to view the African and the African-American struggles as part of the world struggle of human rights.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req.

AFRCNA 0805 - BLACK PERFORMANCE AESTHTICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement

AFRCNA 1012 - EARLY 20TH CENTURY BLACK SOCIAL MOVEMENT

Minimum Credits: 3
Maximum Credits: 3
This course provides an understanding of the social, political cultural and economic context out of which black social movements developed. The main themes of the course concern migration, class differences, racism, and gender relations. The social movements the course examines includes, the Marcus Garvey movement, father divine, labor organization and the black women's club movement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1021 - HISTORY OF THE AFRICAN DIASPORA

Minimum Credits: 3
Maximum Credits: 3
History of the African diaspora focuses on the historical processes that have shaped, & continue to shape the peoples cultures of the African diaspora. It examines the triangle relationships between the African homeland & its American & European diaspora. Attention will be given to an understanding of the manifold circuits in the trans-Atlantic circulation of peoples, ideas & culture. The dynamism, complexity & global ramifications of the African diaspora will be revealed through discussions of important themes, including race, economic systems & construction of diaspora ID's.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement

AFRCNA 1024 - WEST AFRICAN CULTURES AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1026 - AFRICAN PRESENCE IN LATIN AMERICAN LIT/CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course is a chronological and topical introduction to afro-Latin American culture, making use of literary texts, historical documents, feature films, etc. It aims at providing students with a concrete frame of reference for the African presence in Latin America.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1030 - INTRODUCTION TO AFRICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
A general introduction to African politics at macro level for freshmen and sophomores with special focus on traditional African political system, European imperialism in Africa, African nationalism, independence and post-independence problems of nation-building and economic development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1033 - AFRICAN AMERICANS AND MASS MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course is a critical analysis of mass media content as it pertains to black Americans. The primary media are newspapers, radio, and television. For comparative purposes, media content related to children, other minorities, and women are used.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1039 - HISTORY OF CARIBBEAN SLAVERY

Minimum Credits: 3
Maximum Credits: 3
Today's sounds and tastes of the Caribbean from reggae and salsa music to dishes like mofongo and jerk chicken have deep historical roots in slavery. The Atlantic slave trade transported over four million Africans to the Caribbean ' eight times the number that arrived in the United States. How did Africans and their descendants persevere under the colonial slave system? How does the legacy of slavery present itself in the 21st century? This course explores these questions by examining the Caribbean from the perspectives of enslaved women and men from the 17th through the 19th centuries, particularly in Cuba, Haiti, and Jamaica, and their contemporary manifestations in films, policies, and national identities
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1083 - SPECIAL TOPICS: LITERARY PAN-AFRICANISM

Minimum Credits: 3
Maximum Credits: 3
This course is a study of literary texts that survey Pan-Africanism, or unity and mutual cooperation among people of African descent, from many different angles. Writers across Africa and the Diaspora have created a robust genre of storytelling about returns from the Diaspora to Africa that celebrate the awareness of homelands and suggests various ways of reconciling heritage and diversity. We will study the writings of Maryse Conde, Ama Ata Aidoo, Wole Soyinka, Ayi Kwei Armah, George Samuel Schuyler, and more.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Writing Intensive Course (WRIT)

AFRCNA 1108 - AFRICAN AMERICAN FOLK CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course will explore several aspects of African American folk culture being defined as non-elite expressions of art, music, dance, theatre, literature, humor, material culture, and religious beliefs. Particular attention will be given to the role of folklore in the perpetuation and transmission of shared cultural knowledge among blacks in the United States.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1145 - AFRICAN AMERICAN RHETORIC

Minimum Credits: 3
Maximum Credits: 3
The purposes of this course are a historical-critical review of scholarship in black American rhetoric; and a theoretical-conceptual framework for the study of black American rhetoric. This course places considerable emphasis on the African roots of black American rhetoric, but the ultimate concern is with black Americans' behavior. The course covers consequences of African and European inter actions in America, factors that forged the distinctive aspects of black American rhetoric, the effects of culture, racism, colonialism, and social class on communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1150 - CONTEMPORARY AFRICAN AMERICAN WRITING

Minimum Credits: 3
Maximum Credits: 3
Writers in the period spanning the civil rights and black nationalist-humanist movements became a vanguard voice for black people. This course explores the written language of the period as an aid to the creation of student writings. As such, this course is a workshop and continuation of black creative writing on a higher level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1201 - GLOBAL DIASPORAS: CONTEMPORARY AFRICAN AND CARIBBEAN MIGRATION

Minimum Credits: 3
Maximum Credits: 3
What do Akon and Rihanna have in common? They are both part of recent diasporas from Africa and the Caribbean. This course focuses on the issues and experiences of people of African descent in contemporary (20th and 21st centuries) migratory diasporas from both Africa and the Caribbean. The course draws on extensive literature on migration, transnationalism, racial and ethnic identity formation, health, and other topics to illuminate the causes for migration and the experiences that migrants have in different host countries. What experiences do migrants from Africa and the Caribbean share? How do their experiences differ? How do migrants define themselves in new host countries? How do they stay connected to their homelands?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1240 - AFRICAN LITERATURE AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Inquiry into significant aspects of contemporary African social, political, cultural and human problems approached through the detailed study of representative African novels, plays and poetry written by African authors.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1245 - STUDIO IN AFRICAN AMERICAN POETRY AND POETICS

Minimum Credits: 3
Maximum Credits: 3
Studio in African American Poetry and Poetics is a course in interdisciplinary creating. In this class, we will read, think, and work across genres, mediums, and disciplines, and collapse the walls between presenter and audience, creator and critic, as we work individually and collaboratively toward new modes of making. Dawn Lundy Martin, Co-Director of the Center for African American Poetry and Poetics (CAAPP), has said that "like innovators in tech, we want to be open and inclusive as we generate new ideas about what it means to work in the fields of African American poetry and poetics. This seems especially important in these trying and divisive times." To this end, we are working toward a practice-based poetics, where creating is a way of working through questions to arrive at new ideas. Collaboration, then, the process of creating in partnership, in community, is an expression of the practice of poetics at its most dynamic. In this spirit of collaboration, the Studio will provide students with opportunities to engage with CAAPP's visiting poets and artists in the intimate space of the classroom and to work on CAAPP events.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1250 - BLACK EUROPE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1306 - WORLD LITERATURE IN ENGLISH

Minimum Credits: 3
Maximum Credits: 3
This course examines contemporary literature, primarily in English, written in eastern Europe, Africa, Latin America, etc. It pays particular attention to its depiction of social, political and moral concerns.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1309 - WOMEN OF AFRICAN AND AFRICAN DIASPORA

Minimum Credits: 3
Maximum Credits: 3
A cross-cultural study of women of African descent in West and southern Africa, the United States, brazil, and the Caribbean.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1310 - CULTURES OF AFRICA

Minimum Credits: 3
Maximum Credits: 3

This course explores the traditional cultures and societies of Africa from prehistoric to modern times. Emphasis is on the conditions prior to contemporary changes but some attention is given to modern developments. Concern is with the variety of cultures on the continent. How people make a living. What family life is like? How disputes are settled, and religion. Through lectures, films, and readings, the student gets a feeling for life in this fascinating part of the world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1330 - SCIENCE AND TECHNOLOGY IN AFRICANA CONTEXT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

AFRCNA 1331 - AFRICAN LIBERATION MOVEMENTS

Minimum Credits: 3
Maximum Credits: 3
A course on the theories of revolution and national liberation struggles, decolonization and guerrilla warfare, and their special application to continental African experience since the end of World War II.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1334 - MUSIC IN AFRICA

Minimum Credits: 3
Maximum Credits: 3
The historical, social, and cultural background of music in Africa with particular reference to music in community life, performing groups, the training of musicians, instrumental, resources, structures in African music and the interrelations of music and dance. (Slides, films and recordings will be used to illustrate lectures.)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1335 - AFRICAN-AMERICAN MUSIC IN THE UNITED STATES

Minimum Credits: 3
Maximum Credits: 3
This course is designed to familiarize the student with various phases of African-American music existing in North America; blues, gospel-spirituals, work songs, children's games songs, and classical compositions of ragtime composers Scott Joplin, J.P. Johnson, etc. Students will conduct field projects centered around "street recordings, locations, interviews of local and visiting artists, etc." A detailed study of great Pittsburgh performers present and past will constitute a major portion of this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1347 - FRANCOPHONE AFRICANA LITERATURE

Minimum Credits: 3
Maximum Credits: 3
An examination of the cultural, social, and political relationships of French-speaking African and the Caribbean as reflected through different genres from the 1900's. Reading poetry, folklore, and novels produced by African writers sheds light on the issues confronting them such as polygamy, urbanization, assimilation, rituals, and the marginal man and woman.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

AFRCNA 1349 - CONTEMPORARY CARIBBEAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Study the fiction, poetry, and drama of the English Caribbean in chronological order. Exile, liberation, autonomy, the female voice, cultural, and political identity will be examined in writing from Jamaica, Trinidad, Grenada, Antigua, and Guyana with recordings and films.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1353 - COMPARATIVE DANCE EXPRESSION

Minimum Credits: 3
Maximum Credits: 3
This course will examine the cultural patterns of black dance styles and the similarities and differences in the motor behaviors among blacks in dance from South America, the Caribbean islands, Africa, and North America. Contents of the course will be introduced through films, lecture and videotapes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Creative Work General Ed. Requirement, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1402 - LEARNING PARADIGMS AFRICAN AMERICAN CHILD DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
To examine systemic factors which affect the cultural, social, emotional, and cognitive development of black children.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement

AFRCNA 1415 - RELIGION AND RACE

Minimum Credits: 3
Maximum Credits: 3
This course examines the intersections of religion, race, and racism. Recently, scholars of religion have demonstrated that religious identities are often racialized as well. In this course, we will discover that religion and race are both modern categories rooted in post-enlightenment ideas about what it means to be human. We will see how the establishment of these religious and racial categories led to new hierarchies and inequalities. We will discuss how post-enlightenment thinkers linked religion and race, and how their ideas played a role in European imperialism. We will also investigate how the discipline of religious studies has developed its analytical tools with a racialized understanding of religion. The course will examine case studies in which religion has been racialized, and consider the political ramifications of these examples. In particular, we will think about the impact of white supremacy on black religion in the united states, the complicated relationship between antisemitism and Islamophobia, and contemporary Islamophobia in the US. Finally, we will explore the possibilities of anti-racism through faith-based scholarship and activism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1418 - FROM VODOU TO SANTERIA: RELIGIONS OF THE WEST AFRICAN DIASPORA

Minimum Credits: 3
Maximum Credits: 3

This course is an introduction to the study of West African Diaspora religions in the Americas. We define "diaspora" as the spread and dispersal of people of African descent â both forced and voluntary â through the slave trade, imperial and colonial displacements, and postcolonial migrations. In what form do African religious expressions exist in the African Diaspora communities? This course exposes students to the indigenous African foundations of the religious beliefs and religious practices of African communities living in the Diaspora. Students will receive historical, ethnographical, and anthropological approaches to grasp the essence of these non-doctrinaire and non-textual religions focused on a rich memory of African deities, rituals, morality and practices that have been passed from generation to generation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1420 - POWER AND PERFORMANCE IN AFRICA: FROM HIP-LIFE TO SOUKOUSS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1425 - CARIBBEAN IDENTITIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

AFRCNA 1450 - AFRICANA CULTURAL MEMORY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1510 - HEALTH IN THE AFRICAN DIASPORA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

AFRCNA 1522 - SEX AND RACISM

Minimum Credits: 3
Maximum Credits: 3
Sex and racism affords an opportunity to explore sex, sexism, and racism, to examine the historical development and economic impact of racism in America, to analyze the conceptual framework, the research methods, and approaches from which past and current studies on sex, sexism racism, have been and are being developed. The course will also explore sex and racism as a multi-dimensional continuum, and solutions to sex and racism.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements

AFRCNA 1535 - DIMENSIONS OF RACISM

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, Urban Studies

AFRCNA 1538 - HISTORY OF BLACK PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
This course will explore the role and experiences of black Pittsburghers over the past 200 years of the city's history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

AFRCNA 1555 - AFRO CARIBBEAN DANCE

Minimum Credits: 3
Maximum Credits: 3
This course will focus on Katherine Dunham as an ethnologist and choreographer politically, socially, and aesthetically. The course discussion will clearly define the contents of Dunham's dance research and life experiences of Haiti.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Creative Work General Ed. Requirement, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1616 - AFRICAN AMERICAN WOMEN WRITERS

Minimum Credits: 3
Maximum Credits: 3
An inter-or-cross genre study of the African North American experience thru selected readings in novels, poetry, drama, short stories, and the essay (religious, secular and philosophical).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1628 - AFRO-LATINOS IN THE UNITED STATES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

AFRCNA 1655 - AFRICAN CINEMAS/SCREEN GRIOTS

Minimum Credits: 3
Maximum Credits: 3
Ousmane Sembene, known as the father of African cinema, popularized the notion of the African director as the modern day griot (oral historian) and traditional storyteller. Therefore, this course is an introduction to a cross-section of post-independence films (1963-2004) as an art form and as a visual space on socio-political, economic and cultural topics by screen griots from Burkina Faso, Cameroon, and chad, the democratic republic of the Congo, Ethiopia, Niger, Nigeria, Senegal, South Africa and Zimbabwe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1656 - HISTORY OF AFRICA SINCE 1800

Minimum Credits: 3
Maximum Credits: 3
Surveys history of Africa from 1800 to the present day. Major themes include African statecraft, European colonization, African nationalism and post-independence problems. Processes of African institutional growth within the perspectives of resiliency, change and adaptation will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1661 - POLITICAL ECONOMY OF AFRICA

Minimum Credits: 3
Maximum Credits: 3
An inquiry into the process of political and economic development in Africa from colonial domination to the present. Problems of economic dependence and integration into the global capitalist economic system are examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFRCNA 1704 - AFRICANA WORLD LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Despite their geographical and cultural differences, writers from Africa, the Caribbean, and the United States undergo similar experiences of oppression. Problems of self-identity, and the quest for self-respect. These similarities will be discussed in class along with a comparative approach to the texts with supplementary films, slides, and recordings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1710 - AFRICAN AMERICAN HEALTH ISSUES

Minimum Credits: 3
Maximum Credits: 3
Course will focus on black health issues from analytical, theoretical and practical perspectives. These perspectives will be introduced through cross examination of health topics which are critical to the black population, the developing of health policies and conceptual models for health promotion and disease prevention.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement

AFRCNA 1720 - WEST AFRICA IN THE ERA OF THE SLAVE TRADE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

AFRCNA 1725 - SOCIAL AND HEALTH ISSUES IN EAST AFRICA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: African Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

AFRCNA 1760 - AFRICANA THEORY & METHODOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement

AFRCNA 1768 - AFRICANA SENIOR RESEARCH SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course will assist the student in conducting a research project of her choice. The student will select a topic, write a proposal including the statement of a question or hypothesis, a list of the goals and objectives. A design of the methodology and a review of the relevant literature.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Requirement Course

AFRCNA 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
This course offers the student an opportunity to extend his/ her academic training to a practical work experience in the city of Pittsburgh.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

AFRCNA 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Students desiring to take an independent study should develop a typed proposal on a specific topic outlining the substance of the work, the objectives, the methodology, and the evaluation by which to determine when the objectives are met.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: African Studies

AFRCNA 1902 - DIRECTED READING

Minimum Credits: 1
Maximum Credits: 6
This course introduces the students to a specific topic which is not normally taught in an Africana studies core course. It is an individual project administered under faculty supervision.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

AFRCNA 1903 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 6
This is an individual research project/course under the supervision of a faculty member. Theoretical and conceptual interest in the emerging discipline of Africana studies and the black experience offer students dynamic, creative and intellectual avenues into new areas for discovery.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: African Studies

AFRCNA 1904 - REBELS AND REVOLUTION

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

American Sign Language

ASL 0101 - AMERICAN SIGN LANGUAGE 1

Minimum Credits: 4
Maximum Credits: 4
In this course, students are taught American sign language (ASL) vocabulary and grammatical structures. Students will also learn and ASL fingerspelling system, the use of gestural devices and how to appropriately use the signing space in ASL. Further, students will learn about deaf culture in the United States. Out-of-class participation in deaf community events in required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ASL 0102 - AMERICAN SIGN LANGUAGE 2

Minimum Credits: 4
Maximum Credits: 4
Students will learn more difficult vocabulary (signs) and how to use them in one-to-one, small group, and large group communication. Students will also be exposed to classifier constructions. This course is a continuation of ASL I (LING 0471) and it utilizes a similar curriculum.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0471 or ASL 0101; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement

ASL 0103 - AMERICAN SIGN LANGUAGE 3

Minimum Credits: 3
Maximum Credits: 3
This course continues the study of ASL. The students will work on developing intermediate communication skills and will concentrate on production skills. Linguistic and cultural features will be presented in the context of the language learning experiences. This level will also examine and discuss its use and effect on and in the deaf culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0472 or ASL 0102; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement

ASL 0104 - AMERICAN SIGN LANGUAGE 4

Minimum Credits: 3
Maximum Credits: 3
This advanced course of ASL concentrates on developing more precise skills and competencies by using appropriate variations of ASL (regional, racial/ethnic, stylistic and age related) vocabulary. Students will also be given the opportunity to use ASL by volunteering in the deaf community.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0473 or ASL 0103; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement

ASL 0105 - AMERICAN SIGN LANGUAGE 5

Minimum Credits: 3
Maximum Credits: 3
This course provides an opportunity for students to formally pursue work on an individual basis. This course also applies knowledge of American Sign Language (ASL) grammar and vocabulary to the description of increasingly complex constructs, processes and situations. Students will: incorporate multiple character role shifting into medium-length stories, narratives and the discussion of hypothetical issues; identify and discuss various controversial issues via debate and presentation; continue to analyze multiple meaning English words and English idioms to express concepts in ASL; have the opportunity to gain knowledge about the Deaf Community as a part of the human diversity including people of color, genders, LGBTQ people, people with disabilities, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0474 or ASL 0104; MIN GRADE 'C' FOR ALL LISTED COURSES

ASL 0106 - AMERICAN SIGN LANGUAGE 6

Minimum Credits: 3
Maximum Credits: 3
Introduction to specific topics and content areas in ASL discourse, including Visual Gestural Communication, International, Deafblind, Mental Health/Medical/Sexual/Drugs/Other Special Topics in sign communication depending on the needs and interests of Pitt Students. This course also provides students with opportunities to expand expressive and receptive use of American Sign Language (ASL), including a variety of special topics at an advanced level. Special emphasis is on increasing spatial use, ASL fluency and non-manual grammar and behaviors. Skills related to research in sign language discourse will be introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1727 or ASL 1909 or ASL 0105; MIN GRADE 'C' FOR ALL LISTED COURSES

ASL 0111 - INTRODUCTION TO BRITISH SIGN LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
Students will get a basic introduction to British Sign Language (BSL).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ASL 1615 - DEAF CULTURE

Minimum Credits: 3
Maximum Credits: 3
Many deaf people in the U.S. Are united by a language (ASL) that differs from English and a culture with characteristics that differ from those of the larger hearing society. This culture is known as deaf culture, and students in this course will be introduced to various facets of American deaf culture through readings, videos, and discussions. Students will also explore other deaf cultures throughout the world. Among the course foci are: issues of accessibility, perspectives of deaf versus hearing individuals, and various examples of deaf literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0472 or ASL 0102 (MIN GRADE 'B'); CREQ: LING 0473 or ASL 0103 (MIN GRADE 'B'); PLAN: American Sign Language (ASL-CS1); LEVEL: Junior or Senior
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ASL 1625 - THE DEAF AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
The culture of deaf Americans is distinct from that of mainstream American society. The primary focus of this course is to expose students to the culture of the deaf in the United States and around the world. In addition to teaching students how to interact with the deaf in a culturally appropriate way, the course will help them understand deaf culture as part of human diversity. Among the course foci are: issues of accessibility, perspectives of deaf versus hearing individuals, and various examples of deaf literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ASL 1635 - ANALYSES OF ASL LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course is designed for students to explore and analyze American sign language and American deaf culture through ASL literature. Studying ASL literature is a way to examine the linguistic complexity of ASL as well as explore the deaf community's values and traditions as a minority group and a group to which visual depiction of ideas is highly valued. This course is conducted in ASL.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0473 or ASL 0103 (MIN GRADE 'B'); CREQ: LING 0474 or ASL 0104 (MIN GRADE 'B') and (LING 1722 or ASL 1615) (MIN GRADE 'B') PLAN: American Sign Language
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ASL 1700 - ASL-BSL COMPARATIVE ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Students will experience another culture by visiting a country where a different sign language is used. Students will use both their receptive and expressive signing skills to learn about another sign language. Students will learn some BSL, though should not expect to achieve a working fluency. Students will embrace another culture through observation and participation. Students will experience signing with members of the British Deaf community within an educational setting or community setting. Students will learn about differences and similarities between ASL and BSL as well as American Deaf culture and British Deaf culture. Students will improve their signing ability through intensive practice. Students will be voice off during the trip and will demonstrate the ability to behave appropriately within a Deaf culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ASL 1705 - STRUCTURE OF SIGN LANGUAGES

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the linguistic structure of sign languages, drawing examples principally, though not exclusively, from American sign language (ASL). It will also highlight similarities and differences between sign languages and spoken languages. In addition to structural features, the course will cover mechanisms unique to visual/spatial languages, the use of the face and body for grammatical signals, language variation, and acquisition of sign languages.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

ASL 1715 - STRUCTURE OF ASL AND ENGLISH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0473 or ASL 0103 (MIN GRADE 'B') and (LING 1000 or CSD 1020); CREQ: LING 0474 (MIN GRADE: 'B'); PLAN: American Sign Language

ASL 1725 - SOCIOLINGUISTICS OF SIGN LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
There are various sociolinguistic topics that one must consider with respect to signed languages of the deaf. Regarding language contact, ambient languages-either signed or spoken-influence a signed language. Less than 10% of deaf people are exposed to signed language from birth, which results in unique phenomena. Additionally, signed languages exhibit variation based on a myriad of social and geographical factors. These topics, in addition to language planning and language policy, will be addressed in this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

ASL 1800 - INTRODUCTION TO ASL-ENGLISH INTERPRETING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ASL 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Independent study in American Sign Language (ASL)
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ASL 1905 - UNDERGRADUATE TEACHING ASSISTANT IN AMERICAN SIGN LANGUAGE

Minimum Credits: 1
Maximum Credits: 3
Undergraduate Teaching Assistant for ASL Class
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ASL 1909 - TOPICS IN SIGN LANGUAGE STUDIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 474 and 1722; PLAN: American Sign Language

Anthropology

ANTH 0112 - TOURISM

Minimum Credits: 3
Maximum Credits: 3
This is a course designed to introduce the students to the many facets of the world's largest industry, tourism. The approach is multidisciplinary focusing on such issues as work and leisure, tradition and modernity, growth and pollution, security and terrorism, privilege and servitude.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 0501 - ARCHEOLOGY: AN OVERVIEW

Minimum Credits: 3
Maximum Credits: 3
Designed for non-majors, this course presents a broad introduction to the goals and techniques of today's archeology through readings, videos, and short exercises. The course reviews global human prehistory from the earliest appearances of human ancestors some 4 million years ago through the development of the Ancient Egyptian, Mayan, Chinese, and Inca Civilizations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 0534 - PREHISTORIC FOUNDATIONS OF EUROPEAN CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
Neanderthals, ice-age art, Indo-European languages, Stonehenge, megaliths, Celts, and more; the major archeological discoveries, from the first traces of human occupation of European soil up to the early middle ages, will be covered through illustrated lectures, films, and perhaps museum visits. Course also offers a basic introduction to the discipline of archeology, thus serving as preparation for other courses in the subject; it also serves as a useful foundation for studies in history, ethnic history, art history, and classics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ANTH 0536 - MESOAMERICA BEFORE CORTEZ

Minimum Credits: 3
Maximum Credits: 3
When Cortez and his Spanish soldiers arrived in Mexico, they found Indians living in large cities with impressive temples raised on tall pyramids, lavish palaces for rulers, elaborate markets, and skilled craftsmen working in gold, copper, feathers, stone, pottery, and other materials. They were astonished at a civilization so like their own and yet so different (so "barbaric" to European eyes). This course explores the development of this civilization back to its roots several thousand years ago, by reconstructing earlier cultures known only from archeological evidence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, Latin American Studies, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 0538 - THE ARCHEOLOGIST LOOKS AT DEATH

Minimum Credits: 3
Maximum Credits: 3
Pyramids, tombs, burial mounds, graves, skeletons, mummies; the stuff of gothic romance. But the way people disposed of their dead also tells us an amazing amount about life in the past. We will look at the wide range of burial practices in the world, including the "American way of death", and then concentrate on the physical remains themselves. What do burial practices indicate as to beliefs, rituals, religion and society?
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 0582 - INTRODUCTION TO ARCHEOLOGY

Minimum Credits: 3
Maximum Credits: 3
Examines the nature of modern archaeological research. Lectures look at how archaeologists work in the field, their analytic techniques, and some of the principal methodological and theoretical problems facing the field. Specific examples are used to illustrate these topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 0601 - PHYSICAL ANTHROPOLOGY: OVERVIEW

Minimum Credits: 3
Maximum Credits: 3
Designed for undergraduate non-majors, this course will provide a basic introduction to the issues, theories, and methods of physical anthropology. Beginning with a consideration of evolutionary, genetic and geologic principles, the course goes on to consider the diversity of fossil and extant primates, including humans. Issues in anatomy, paleontology and behavior will all be addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 0620 - BIOCULTURAL ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to general anthropology emphasizing the interaction of human biology and behavior. The course considers what it means to be human by examining the biocultural interface of both present and past human populations. Topics of discussion will include human adaptation to extreme environments, cross-cultural variations in infant sensorimotor development and biological and cultural diversity in general. An understanding and appreciation of the how's and why's of human biological and cultural variation will be stressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 0630 - FORENSIC ANTHROPOLOGY: AN INTRODUCTION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ANTH 0680 - INTRODUCTION TO PHYSICAL ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce the undergraduate to the issues, theories and methods of physical anthropology. Beginning with a consideration of evolutionary, genetic and geologic principles, the course goes on to consider, the diversity of fossil and extant primates, including humans. Issues in anatomy, paleontology and behavior will all be addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ANTH 0681 - INTRODUCTION TO HUMAN EVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This is an introduction to human evolution and, in general, the evolution of the larger group to which we belong, the order primates. We will survey first the development of evolutionary ideas and modern developments in biology and geology and then review the diversity of living and fossil primates, dwelling especially on the discoveries and controversies surrounding our own evolutionary past.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ANTH 0701 - CULTURAL ANTHROPOLOGY: OVERVIEW

Minimum Credits: 3
Maximum Credits: 3
Designed for undergraduate non-majors, this course will provide a broad introduction to cultural anthropology. This course examines the behavior and customs of peoples throughout the world and considers what it means to be human. We will consider patterns of marriage, family organization, gender, political behavior, economic systems, rituals, etc., Of other peoples and compare these with American social patterns.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 0710 - SPECIAL TOPICS IN CULTURAL ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will be on a topic in the area of specialization of a visiting scholar yet to be determined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 0711 - THE INTRODUCTION TO THE ANTHROPOLOGY OF SPORT

Minimum Credits: 3
Maximum Credits: 3
Sport captures the minds and money of billions of people everyday, the Olympics, World Cup Soccer, American College Football, and Little League World Series. Television, radio, cell phones, internet keep us updated on the latest scores, highlights and goings on of our favorite and least favorite athletic personalities. Yet despite its overwhelming significance in everyday life it goes largely ignored in Anthropological discussions. This course serves to introduce students to the significance and centrality of sport in understanding and interpreting social life. Sport will be critically examined through major anthropological categories of race, class, ethnicity, gender and power. We will be using sport as the focal point with which to examine varying attitudes, institutions and social dynamics. This will not be a history of sport nor will it be a cross-cultural comparison of different kinds of sport from around the world but rather this course will seek to demonstrate to you how sport figures into the shaping of our worldview and structuring of social institutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, Urban Studies

ANTH 0713 - ASIA NOW

Minimum Credits: 3
Maximum Credits: 3
The course is innovatively interdisciplinary, reflecting current anthropological theory. The topical focus is on contemporary Asia. It is creatively structured around a series of high-profile, public guest lectures given by leading, internationally recognized Asian Studies and Global Studies Scholars representing a spectrum of disciplines. The class will meet twice a week, once for a lecture and once for a seminar discussion focused on reading assignments chosen to highlight anthropological problems, questions and analytical perspectives that relate to the weekly guest lecture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 0715 - ANTHROPOLOGY OF LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to offer students a basic yet comprehensive survey of the anthropology (including history, archeology and geography) of Latin America. This survey course will emphasize the development of Latin American societies and cultures since the European conquest, and focus on key issues/themes that have consistently surfaced in Latin American cultural anthropology and that have continuing priority, relevance and interest up to the present. This course is especially tailored to freshmen students with little or no knowledge of Latin America.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 0717 - MAGIC, WITCHCRAFT AND THE SUPERNATURAL BODY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 0730 - HIMALAYAN GEOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
The Himalayan region is characterized by a tremendous range of social and cultural diversity that corresponds to climatic, ecological and geographical variation, as well as local and regional geopolitical factors. Historical change from the emergence of early forms of social complexity centered on chiefs and their forts ' from which the regional designation of 'Garhwali' takes its name ' through the development of kingdoms and larger polities shows the intimate link between geography, environment and socio-political transformation. Similarly, local language patterns, regional religious practices, musical styles, mythology, food culture, sartorial fashion, architectural design, agricultural and transportation technologies and engineering and trade networks have all been shaped by the structure of Muntain barriers, bounded valley communities and bracketed lines of communication that follow river systems. Whereas the political economy of the Himalayas has been structured around agricultural production, and the development of elaborate field terrace systems, there have also been subsidiary economies centered on trans-Himalayan trade and pilgrimage as well as pastoral nomadism and transhumance. Since the colonial period, the Himalayas have increasingly become a place for rest, relaxation, tourism and adventure, and this ' along with further political transformations since Indian independence `has led to the rapid development of urban areas. This course will provide a survey of Himalayan history, society and culture with a focus on the relationship among nature, the environment and geography.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 0768 - HUMAN SEXUALITY IN CROSS CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course explores the expression of human sexuality across a diversity of cultural and social settings using a cross-cultural framework that is based on comparing information on sexuality in other cultures with data from us. It includes how human groups manage sexuality and reproduction; theories of the development of marriage, family, and household systems; differences in values and expectations related to sexuality; the development as sexual expression across the life span; understanding heterosexual and homosexual relationships; and understanding sexual violence.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 0780 - INTRODUCTION TO CULTURAL ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3

By examining the behavior and customs of peoples throughout the world, the course considers what it means to be human. We will describe the patterns of marriage, family organization, warfare and political behavior, economic systems, rituals, etc., Of other peoples, especially those of tribal societies, and compare these with American social patterns. Anthropological films and slide presentations will supplement lectures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Childrens Literature, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1335 - GLOBALIZATION

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the economic, social, technological, environmental, and ideological impacts of globalization on national communities, with an emphasis on the cultural and political dynamics of the process. Student research and oral presentation skills are emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1441 - FIELD METHODS IN LINGUISTICS

Minimum Credits: 3
Maximum Credits: 4
This course is meant to simulate the experience of linguistic field work, and raise awareness about the effectiveness of specific interview techniques for acquiring linguistic data. The course will give instruction and experience in eliciting data from a speaker of non (indo) European language. Students will undertake the investigation of the phonology, some aspect of grammar, and the ethnosemantic study of a taxonomically structured semantic field such as plants or animals. Students will make detailed elicitation plans in advance of their administration.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: LING 1578 and 1773 and 1777; LVL: Sr

ANTH 1447 - LANGUAGE, CULTURE, AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Certain cultural concerns are well-labelled linguistically: kinship, plant-names, diseases, colors, etc. The study of how such semantic fields are labelled and organized is ethnosemantics. Much of the way language is used depends on the context of speaking. Different ways of talking to different people is the subject matter of sociolinguistics. Some thoughts that we habitually think seem illogical on reflection, but it seems as if our language predisposes us to think this way. Such phenomena are addressed by the Sapir-Whorf hypothesis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Writing Requirement Course

ANTH 1450 - GENDER AND SUSTAINABILITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1490 - CROSS-CULTURAL POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course is a comparative examination of political behaviours in small-scale and large-scale societies through the anthropological holistic lens which sees things political as embedded in, and intertwined with, the likes of kinship, resources, economy, belief systems (religion), etc. The course approaches power as a problematic, and emphasizes agentive strategies at the individual and group levels. One of the continual and major issues in the course will be to address the dynamics between small-scale and local experience, with large-scale (read state and global) forces in some selected

instances.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ANTH 1516 - SPECIAL TOPICS IN ARCHAEOLOGY GEOPHYSICS

Minimum Credits: 1
Maximum Credits: 1
This course provides a general introduction to common methods of geophysical prospection being used within archaeology. Classroom lectures will be provided on: (i) integration of geophysics as a tool within broader research programs, (ii) background theory on the methods and their use in field research (fluxgate gradiometery, earth resistance, gpr, magnetic susceptibility, electrical conductivity), and (iii) opportunity to process and interpret actual geophysics datasets. Hands-on training in geophysics survey also will be provided through practical field sessions including: fluxgate gradiometry, earth resistance, and magnetic susceptibility.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

ANTH 1520 - SEDIMENTOLOGY AND STRATIGRAPHY

Minimum Credits: 4
Maximum Credits: 4
The first part of this course involves the description of sedimentary particles and deposits using the fundamental properties (composition, size, shape, orientation and packing) and derived properties (porosity, permeability and sedimentary structures). Included is a discussion of the processes related to these properties. The second part reviews modern sedimentary environments and their rock products. Finally, principles of stratigraphy are introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 0055

ANTH 1524 - CHINESE ARCHAEOLOGY

Minimum Credits: 3
Maximum Credits: 3
An introduction to Chinese Archeology from the earliest known beginnings through the Han Civilization of the second century A.D. Attention will be given to innovations of people in this part of the world -- the agricultural beginnings, the first cities and states, the formation of an empire. Emphasis will be placed on such topics as the role of archeology in the study of history and art as well as in understanding china today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

ANTH 1525 - EASTERN NORTH AMERICAN ARCHEOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course deals with cultural development in the eastern United States from approximately 20,000 years ago to the period of European contact. Particular attention will be paid to man's adaptation to late pleistocene and holocene environments, the initial occupation of the region East of the Mississippi, the origins of agricultural systems and the rise of complex societies, including the Adena, Hopewell, and Mississippian manifestations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1526 - WESTERN NORTH AMERICAN ARCHEOLOGY

Minimum Credits: 3
Maximum Credits: 3
The prehistory of Western North America is examined in detail from the initial peopling of the area to the period of historic contact. Special emphasis is given to the Paleo-Indian and archaic techno/subsistence stages in the arid portions of the West.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1527 - ARCHAEOLOGY OF NORTH AMERICAN INDIANS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1528 - SOUTH AMERICAN ARCHAEOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course deals with cultural development in South America from 20,000 B.C. To Spanish contact. Emphasis will be placed on the earliest evidence for man, maritime adaptations, and origins of agriculture, rise of the state in the Central Andes and the rise of complex societies in the tropical forest. Stress will be placed on the evolution of Andean states including the origins and spread of the Chavin, Moche, Nasca, Tiahuanco, Chimu and Inca Empires.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1530 - ORIGINS OF CITIES

Minimum Credits: 3
Maximum Credits: 3
A broad introduction to the process of urbanism and the rise of early pre-industrial cities in both the new and old worlds. Specific cases from MesoAmerica, the Andes, North America, Egypt, and the near East are examined in order to elucidate the varying roles cities played in ancient civilizations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies, West European Studies, Writing Requirement Course

ANTH 1534 - ARCHEOLOGICAL DATA ANALYSIS 1

Minimum Credits: 4
Maximum Credits: 4
An introduction to quantitative data analysis in archeology, this course covers basic principles of statistics, including exploratory analysis of batches, sampling, significance, t tests, analysis of variance, regression, chi-square, and estimating universe means and proportions from samples. The approach is practical, concentrating on understanding these principles so as to put them to work effectively in analyzing archeological data. Much of the statistical work is done by computer.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

ANTH 1535 - BASIC ARCHEOLOGICAL FIELD TRAINING

Minimum Credits: 6
Maximum Credits: 6
The university of Pittsburgh field training program in archaeology is conducted at various locations. Features of the excavations include basic training in mapping, archaeological survey, excavation methods, soil analysis, data recording, and preliminary artifact analysis.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

ANTH 1537 - BASIC LABORATORY ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This is a follow-up course for anthropology 1534 basic field methods in archaeology. In anthropology 1537, students who have participated in the summer field training program will be instructed in the Methodology of Artefactual and Non-Artifactual analysis. All data recovered during the summer field training program will be processed by the students under the supervision and direction of the instructor. Special emphasis will be placed on lithic and perishable analysis as well as paleo-climatic reconstruction and quantitative methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1540 - SPECIAL TOPICS IN ARCHEOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics covered vary greatly with instructor and term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

ANTH 1541 - CULTURAL RESOURCE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course will cover in an introductory way all aspects of cultural resource management and historic preservation. Major topics include federal historic preservation legislation, cultural resources (historic and prehistoric archaeology, historic structures), the national register of historic places, section 106 and 110 of the NHPA, historic preservation planning, and state historic preservation plans. Course will utilize historic architectural examples as well as prehistoric and historic archaeological sites. Greater emphasis placed on how to evaluate historic properties for national register.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ANTH 1543 - ANCIENT STATES IN THE NEW WORLD

Minimum Credits: 3
Maximum Credits: 3
Drawing on the fact that the ancient new world was a dazzling treasure house of non-Western political thought and organization, this course uses archaeology and ethnohistory to document and make comparative sense of the rich variety of political arrangements which existed among prehispanic states in MesoAmerica and Andean South America. A special aim is to understand how Amer-Indian concepts about state craft and rulership mesh with anthropological and other theories about ancient states.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1544 - ANCIENT CIVILIZATIONS

Minimum Credits: 3
Maximum Credits: 3
This course examines the rise and fall of several ancient civilizations. It covers the archaeology and earliest history of regions recognized as significant independent centers for the development of early civilization: Mesopotamia, Egypt, Indus Valley, China, South East Asia, MesoAmerica, and Andean South America. Central themes concern: why and how civilizations first emerge and then collapse; relationships among economic, political, social, and ideological factors in early civilizations; generic versus unique qualities of different early civilizations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1546 - CAVEMAN: ARCHAEOLOGY, POP CULTURE AND THE PRIMITIVE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ANTH 1547 - POTS AND PEOPLE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1548 - AMAZONIAN ARTS: MAKING AND MEANING

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the arts of the Amazonian region in the context of their function and meaning. The course will be taught as a combination of lecture and hands-on experience working with native potters from the Bobonaza river. Students will learn to make pottery in the Kichwa (Quichua) tradition, and to understand the role of pottery and material culture in the daily lives of people in this region. On a number of occasions, students will accompany the native potters on journeys into the adjacent forest to gather materials and to study the patterns in nature that inspire them. Here students will observe related arts such as face paint patterns, beaded ornaments, ritual singing and storytelling. Carefully selected readings and lectures will use these arts as a window for exploring Amazonian thinking about the natural world behind the designs, and the ways in which the designs can be used to understand patterns of social interaction. Interviews with potters will aid in understanding these arts in the context of daily and ceremonial life. In the process, the arts become a doorway allowing the student to explore Amazonian culture and environment first hand. Comparative material from several other world regions will also be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ANTH 1549 - WARFARE IN ARCHAEOLOGY AND ETHNOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ANTH 1552 - A HISTORY OF ANTHROPOLOGICAL THOUGHT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Social Science General Ed. Requirement

ANTH 1556 - ZOOARCHAEOLOGY

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ANTH 1557 - ARCHAEOLOGY OF RUSSIA, CENTRAL ASIA, AND MONGOLIA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1590 - ARCHAEOLOGY OF ISRAEL-PALESTINE

Minimum Credits: 3
Maximum Credits: 3
Is archaeology in a place like Israel-Palestine an objective science? In this course, we explore how past and present are linked as nation-states and religious communities utilize the archaeological record to mold identities and to forward certain narratives. Our focus will be on the major archaeological sites of Israel-Palestine, particularly in Jerusalem and its environs. We will explore the political and religious issues that have emerged from or surround their excavation. Archaeology in the Holy Land has long been driven by a desire to shed light on - or even authenticate - the Bible, while the "exotic Orient" was explored in the 19th and early 20th centuries through western expeditions and excavations that served to further colonial interests. These religious and political motivations persist even if their manifestations have shifted with time. Through site tours, museum visits, student-led discussions, talks with local experts, and even a day participating in an archaeological excavation, students will gain direct experience with the places that have aroused controversy because of their problematic relationship to biblical and other ancient texts and/or because of their location in politically contested space.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1600 - HUMAN EVOLUTION AND VARIATION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1601 - STRUCTURE AND FUNCTION

Minimum Credits: 3
Maximum Credits: 3
Students will explore the literature of human biology and develop questions and hypotheses regarding undocumented concepts. Each student's goal will be to design a laboratory study which tests the hypothesis he/she has formulated. Areas which might be investigated include locomotion, feeding adaptations, and adaption to various environmental conditions. Students will learn techniques of experimental surgery used to investigate the relationships between structure and function.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1602 - HUMAN SKELETAL ANALYSIS

Minimum Credits: 4
Maximum Credits: 4
This is an introduction to the study and analysis of the human skeleton, which will be based on lectures and lab. Topics include: development of teeth and bone, identification of whole bones and fragments and determination of sex, age, and stature (and other metric analyses), disease, and populational features. Real bony materials will be used in lab.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ANTH 1603 - HUMAN ORIGINS

Minimum Credits: 3
Maximum Credits: 3
This will be an in-depth look at the history of study of human evolution and the current theories and controversies surrounding the interpretation of our relatedness to the various apes as well as of the fossils representing our evolutionary past.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1605 - PRIMATE ANATOMY

Minimum Credits: 4
Maximum Credits: 4
This course offers a detailed consideration of the anatomy of the primates. It will follow an integrated regional approach (i.e., The back, the upper extremities, the hand, etc.), However, the major focus will be on the musculoskeletal system. Students will dissect human material (cadavers) but emphasis will be on the comparative aspects within the order whenever possible. Other non-human primate skeletal material will also be used.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ANTH 1609 - ADVANCED SKELETAL ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course provides the student with an in-depth understanding of the skeletal features used to develop the osteobiographic profile (e.g., age, sex, stature, ancestry, handedness, etc.) Of an individual. This analysis is essential for forensic identification and forms the foundation for the reconstruction of ancient individuals and their life-ways. Each student will select some aspect of skeletal analysis and present an overview of the bone biology, the history of the analytical methods, the problems and advantages of each method, modifications that others have made to address these issues, and the current state of knowledge. In the past, some students have proposed new methods of analysis. This will be complemented by a lab exercise designed by the student that will provide data for interobserver analysis of various techniques. The results of this lab will be presented as posters which will be posted on CW at the end of the term. Prior osteological experience is required.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ANTH 0630 or 1602

ANTH 1611 - EVOLUTIONARY THEORY

Minimum Credits: 3
Maximum Credits: 3
Intended as a sequel to ANTH 0011, this course explores modern evolutionary theory in detail. Some coverage is given to the history of debates, but more emphasis is placed on their current status. Both phylogentic and adaptive components of the evolutionary process are discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1613 - PRIMATE BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is a survey of the major groups of living primates (including humans) and of the various hard and soft tissue, as well as physiological and biochemical, systems that distinguish the group as primates and further distinguish the diverse lot of primate subgroups.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1617 - PALEOPATHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1619 - SPECIAL TOPICS IN PHYSICAL ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics covered vary greatly with instructor and term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1701 - RELIGION AND RACE

Minimum Credits: 3
Maximum Credits: 3
This course examines the intersections of religion, race, and racism. Recently, scholars of religion have demonstrated that religious identities are often racialized as well. In this course, we will discover that religion and race are both modern categories rooted in post-enlightenment ideas about what it means to be human. We will see how the establishment of these religious and racial categories led to new hierarchies and inequalities. We will discuss how post-enlightenment thinkers linked religion and race, and how their ideas played a role in european imperialism. We will also investigate how the discipline of religious studies has developed its analytical tools with a racialized understanding of religion. The course will examine case studies in which religion has been racialized, and consider the political ramifications of these examples. In particular, we will think about the impact of white supremacy on black religion in the united states, the complicated relationship between antisemitism and islamophobia, and contemporary islamophobia in the us. Finally, we will explore the possibilities of anti-racism through faith-based scholarship and activism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1702 - MUSLIM POLITICS IN REAL TIME

Minimum Credits: 3
Maximum Credits: 3
Media representations and news stories about the 'muslim world' often project a troubling ahistorical and sensationalist narrative about a region torn by violence, fanaticism and corruption. This information literacy-driven course will teach you how to place current events in the muslim world or involving people of muslim background in their historical context. It will also teach you to discern what constitutes a valid news source and how to find sources you can trust. We'll develop the skills necessary to make sense out of a news landscape that presents conflicting accounts of the same story and that fails to cover some stories altogether. You'll leave this course with a command over how to find news, how to read news, and then how to make sense of it through rigorous historical and social scientific analysis. To that end, you'll learn how to locate and evaluate scholarly sources with the same rigor as you do news sources. You'll be provided with a number of key aspects and developments in the history of the 'muslim world', so that even if you have no prior knowledge of islamic history you will be familiar with the key terms and themes. You will be introduced to the long history of problematic media portrayals of muslims and the muslim world and efforts to both critique and change these representations. We will work intensively with a librarian to master a set of basic information literacy skills at the start of the semester that we will grow and refine as the class progresses. The remainder of the class syllabus will be determined by the current news cycle, which will generate topics to be considered for further historical analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1703 - THE HISTORY OF GOD

Minimum Credits: 3
Maximum Credits: 3
God has a history. In the earliest days of that history, God was worshiped as one of a plethora of deities controlling various spheres of cosmic activity or the human world. Students in this course will learn about this ancient pantheon - how gods functioned in society and how their presence was experienced by those devoted to them. They will then trace the evolution of the God of Israel from a mountaintop deity of the southern Levant in the late second millennium BCE to a supreme deity worshiped by a small group of absolute monotheists based in Jerusalem in the mid-first millennium BCE. Students will become more sophisticated readers of biblical texts in the process. The sources of the Hebrew Bible reflect not a homogeneous monotheism, but rather a diverse set of belief systems tending toward henotheism or even polytheism. By appropriating and reinterpreting the religious myths of their neighbors, the Israelites arrived at a character of the divine that has proven problematic to many contemporary theologians, particularly on issues of LGBT rights, women's rights, and the environment.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1704 - RITUAL: THEORIES AND CASES

Minimum Credits: 3
Maximum Credits: 3
This course deals rigorously with historical and contemporary topics in the study of ritual and its intersections with religion, politics, medicine, disaster studies, and the study of social relations in general. From being considered peripheral to social science, ritual has re-emerged as a fundamental category of human behavior, relevant across a wide span of domains of actions. While there is a close connection between ritual and religion, ritual action is important outside of the sphere of religion and is now considered fundamental to the workings of society. Students in this course will understand how ritual practices vary cross-culturally while serving basic functions. The course provides case studies from different areas and shows how theory applies to these cases. Instruction methods include lectures and discussion; student work includes presentations, essays, and exams.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1706 - TIAWAN DIASPORA

Minimum Credits: 3
Maximum Credits: 3
To better understand the fundamental thrust and impact of the Taiwanese diaspora, and its connection to globalization, this course is designed to explore the major forces that have shaped Taiwanese diasporic identities and overseas communities primarily during the 20thcentury. Students will read articles and books as well as journalists' reports to familiarize themselves with the range of concepts and debates that analyze Taiwanese-diasporic issues.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1708 - SOCIETY, CULTURE, AND POWER IN POST-CONQUEST CITIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1709 - ACTIVIST ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
Following the work of activist anthropology this course will teach students that "critical engagement brought about by activist research is both necessary and productive. Such research can contribute to transforming the discipline by addressing knowledge production and working to decolonize our research process. Rather than seeking to avoid or resolve the tensions inherent in anthropological research on human rights, activist research draws them to the fore, making them a productive part of the process. Finally, activist research allows us to merge cultural critique with political action to produce knowledge that is empirically grounded, theoretically valuable, and ethically viable." (Speed 2006). This course will teach students both the importance and value of conducting research that moves outside of the "ivory tower" of academia. "[A]ctivist scholars work in dialogue, collaboration, alliance with people who are struggling to better their lives; activist scholarship embodies a responsibility for results that these "allies" can recognize as their own, value in their own terms, and use as they see fit." (Hale 2008) This course will explore major conceptual work on the role and ethical responsibility of anthropological research and social justice issues. Students will be required to participate in methodological exercises that will require engagement in the Pittsburgh community. While simultaneously learning as a student one will also be producing tangible resources for under-represented, marginalized and underserved communities.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

ANTH 1711 - ETHNOBIOLOGY: AMAZONIAN RELIGION AND NATURE

Minimum Credits: 3
Maximum Credits: 3
The course explores Amazonian cultural knowledge of plant and animal species, comparing it to scientific knowledge, to uncover underlying assumptions that constitute a systematic, if implicit, Amazonian philosophy of nature. It also teaches students how to ask key questions and to carry out qualitative research on ethnobiology. Over generations of hunting and gathering Amazonian cultures gained an intimate knowledge of their rainforest environment, the most bio-diverse on earth. Now, more than ever, preservation of that environment depends on improving understanding and cooperation between environmentalists and the native peoples who live there; and upon integrating traditional Amazonian and scientific knowledge of the natural world. The course addresses key ethnobiological questions such as: how do native Amazonian people classify plant and animal species? How do they understand the extinction or the emergence of new species? How do they understand plant and animal behavior? How is plant and animal ecology believed to serve as a model for understanding human society and vice versa? How should human emotions be regulated so as to better work with nature? What aesthetic, emotional or religious practices were developed to create bonds of empathy or communication between human beings and other species? What are the practical implications of the answers to these questions for collaborative environmental work with indigenous communities?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1712 - AMAZONIAN ETHNOBOTONY

Minimum Credits: 3
Maximum Credits: 3
This course examines the cultural understanding and uses of plants in the Ecuadorian amazon. How do Amazonian people understand what plants are? How did they originate? How are they classified? How are they similar or different from humans? How are plant foods and medicines believed to work on the human body? How should they be harvested and prepared? What sorts of human moods or attitudes are necessary to work with plants? What ritual techniques are used to achieve empathy required to work successfully with plants?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1713 - HEALTH, NUTRITION, AND POPULATION 1

Minimum Credits: 3
Maximum Credits: 3
This course will provide an introduction to the study of the health, population and nutrition concerns of indigenous peoples; provide an understanding of the health concerns of the Kichwa speaking people of the Ecuadorian amazon and provide a grounding for research on the health of Amazonian peoples. It will be taught as a combination of lectures, discussion of readings, site/field visits, interviewing of key actors and analysis of primary materials derived from interviews and observations of Kichwa people, healers and patients.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1714 - HEALTH, NUTRITION AND POPULATION 2

Minimum Credits: 3
Maximum Credits: 3
This course will continue the study of the health, nutrition and population of the NAPO Kichwa begun in HPNI. It will specifically address the historical and contemporary food systems of the NAOP Kichwa; the production and management of Chica (manioc beer) as a cultural superfood and dietary staple; the management of pregnancy and childbirth in the Kichwa ethnomedical system; the impact of the intercultural health movement and the millennium development goals for safe motherhood on the provision pregnancy and birth care services in the Ecuadorian national system; and the impact of biomedicine on Kichwa health practice. Hpnii will be taught as a combination of lectures, discussion of readings, site/field visits, interviewing of key actors and analysis of primary materials derived from interviews and observations of Kichwa people, healers and patients. It will have a significant independent research component.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1716 - POLITICS OF GENDER AND FOOD

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1717 - MODERN TAIWAN: 1500-1980

Minimum Credits: 3
Maximum Credits: 3
This course teaches students about the social, cultural and economic factors that have shaped modern Taiwan, a critically important nation in the development of globalization in Asia.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1718 - GENDER AND WORK IN CROSS CULTURAL PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1719 - ANTHROPOLOGY OF RACE AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
One of Anthropology's major contributions to the world was the concept of "Race". But after the 1940s it was abandoned and "Culture" became Anthropology's trademark. This course examines why this happened and how our understandings of culture and race are connected. This course takes a critical look at the narratives and discourses in and around race and its relationship to Anthropological and scientific thought. We will examine how these discourses essentialize and naturalize bodies as well as our understandings of them. We will explore narratives which use the tool and authoritative voice of Anthropology, science, scientific method and genetics. In addition, we will look at some of the historical and contemporary narratives of the biological underpinnings of race discourse and its incorporation into everyday imaginings of social identities. This course will seek to engage both the social and biological framings of race and attempt to demonstrate where these discourses converge and where they divert away from one another. In addition to academic readings we will look at blogs, internet posts and media to view and critique the ways in which science logic becomes racialized logic in everyday discourse.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement

ANTH 1721 - CYBER CULTURES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1722 - CULTURE AND POLITICS OF MENTAL HEALTH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1723 - BLACK MASCULINITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1724 - THE ANTHROPOLOGY OF SCIENCE: GLOBAL PERSPECTIVES

Minimum Credits: 3
Maximum Credits: 3
Science and technology are integral to contemporary societies. Understanding how science is produced and how it shapes daily life is a crucial challenge for anthropologists, who have studied the production of scientific knowledge in labs, hospitals, field sites, and elsewhere. While early studies of science as a cultural practice focused primarily on the U.S. and Europe, science and technology are produced and consumed globally. Through analyses of case studies of biotechnology, medicine, genetics, conservation, agriculture, energy, climate science, and computing around the world, this class will investigate the global dynamics of science and technology. Juxtaposing readings on different scientific fields from around the globe, we will look for recurring themes that connect these studies. What happens when science and technology travel, and how do new places emerge as centers of knowledge production? How are culture, identity, technology, and science linked?
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement

ANTH 1725 - SOCIAL AND HEALTH ISSUES IN EAST AFRICA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1726 - GLOBAL PHARMACEUTICALS

Minimum Credits: 3
Maximum Credits: 3
This course examines pharmaceuticals as cultural and social phenomena, following their development, production, marketing, and use around the globe. We will investigate a number of issues, including the growing number of drugs prescribed to Americans each year, the lack of access some populations have to essential medicines, the increasingly global nature of clinical trials, and the role of pharmaceutical companies in the opioid crisis. We will use the study of drugs and medicines to analyze the production of medical knowledge, changing perceptions of health and illness, and the role of the state and the market in the development and distribution of therapeutics. Pharmaceuticals bring together science, clinical practice, marketing, and consumerism, and this course will draw on anthropological research to trace the role they play in global flows of knowledge, capital, commodities, and people.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement

ANTH 1727 - HEALTH AND ENVIRONMENT IN PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
This course examines the relationship between environment and health, with a special focus on the city of Pittsburgh and the surrounding environs as a case study. We will use medical anthropology to systematically investigate the effect of the environment on health and the interplay of natural and human systems. Drawing on research in political ecology, this class will consider the social, political, and economic systems that shaped Pittsburgh and its inhabitants. We will pay particular attention to the way changing industrial and environmental conditions changed incidence of disease, and how exposure to risk and disease are shaped by race, gender, and class. We will examine issues like the histories of air pollution and resource extraction including coal mining, oil and gas drilling and their impacts on the environment and health. The course will examine how knowledge about health is produced and the development of new forms of citizen science that enlist local residents in projects to monitor issues like air quality.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Social Science General Ed. Requirement, Urban Studies, Writing Requirement Course

ANTH 1728 - GENDER AND GLOBALIZATION

Minimum Credits: 3
Maximum Credits: 3
Gender is a key structuring principle of difference and inequality in society, while globalization is a condition characterized by time-space compression and ever-expanding connections across national boundaries. Globalization emerged out of such (and often violent) practices of contact as capitalism, colonialism, socialism, the Cold War, and neoliberalism. This course will explore the intersection of gender and globalization asking how gender shapes processes of globalization and how the role of gender is shifting as national/cultural regulatory systems are no longer able to maintain control over what is recognized as "normative" in the context of gender roles and gendered practices. This course will examine various facets of the interface between gender and globalization in such contexts as cross-border marriages, international adoption, sex and colonialism, gender and state violence, women in socialist welfare states, labor migration, the global sex industry, queer identities and activism, as well as gender and technology (especially, the intersection of gender inequality and the idea of technological enabled empowerment). The particular historical contexts in which we will discuss these themes include colonialism, the Cold War Era, post-socialism, and neoliberalism.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1729 - BRAZIL

Minimum Credits: 3
Maximum Credits: 3
The course begins with an overview of Brazilian culture and of the country's enormous resource base. Cultural change is traced through the pre-Columbian, colonial, imperial, and republican periods. A major theme throughout is the evolution of a Portuguese heritage into today's distinctive Brazilian national culture. The country is then divided into five regions as a means of understanding its internal diversity. Popular American ideas about subjects like carnival, the amazon rainforest, coffee, Copacabana Beach, and the huge foreign debt are also dealt with.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1730 - ETHNO-NATIONAL VIOLENCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1734 - GENDER IN EAST ASIA

Minimum Credits: 3
Maximum Credits: 3
This course focuses on gender in East Asia, particularly in Chinese, Japanese, and South Korean society. Materials from Hong Kong and Taiwan will be included. The course is broadly comparative, and raises questions about the similarities and differences in gender roles and meanings within this vast and diverse region. Key themes include gender and work, sexuality, religion, and family. The primary focus is on contemporary East Asia, and on recent change.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1737 - SPECIAL TOPICS IN CULTURAL ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will be on a topic in the area of specialization of a visiting scholar yet to be determined.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1738 - GENDER PERSPECTIVES IN ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course analyzes gender perspectives in anthropology. Students are asked to consider how gender differences relate to women's and men's roles in productive labor, in property rights, and in family and kin relations. Special attention is given to the way gender and sexual difference are represented in culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1740 - GENDER, SEXUALITY, AND CHILDHOOD IN A GLOBAL CONTEXT

Minimum Credits: 3
Maximum Credits: 3
"Although childhood is often conflated with a biological category based on an immature body, in reality it is much more. Instead, this course examines the ways in which childhood is a discursive and continuously shifting category, one that changes across time and place. This course will introduce students to the study of children and childhood in a cross-cultural context and will pay particular attention to the ways in which notions of childhood, and the experience of being a child, draw from and reproduce understandings of gender and sexuality as they intersect with race, class, ethnicity, etc. Through readings, lectures, and films, we will also consider the meaning of gendered childhoods in light of contemporary forms of conception, children's culture (media, toys and artifacts, stories), child labor and play, and ritual and coming of age ceremonies. An analysis of these contemporary phenomenon highlight local and regional notions of childhood and their intersection with broader global patterns."
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1741 - ENERGY AND ENERGOPOLITICS IN EURASIA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1744 - ANTHROPOLOGY OF THE OLYMPICS

Minimum Credits: 3
Maximum Credits: 3
The modern Olympic games have existed for more than 100 years. In that time it has become both a local and global spectacle incorporating now well established traditions and rituals from the lighting of the eternal flame to the medal ceremony. But what do these rituals and traditions mean to athletes, organizers and spectators? The Olympics are often described as an event that brings the people of the world together under the auspices of sports' altruism. However, the Olympics are also known to increase sex trafficking, gentrification of neighborhoods, and incarceration of targeted populations. Do the Olympics mean the same thing to everyone who are directly impacted by it? This course explores the role of ritual and tradition as public spectacle and the contested meanings derived from different parts of communities impacted by the Olympics. Since the Olympics involves the participation of world leaders, global dignitaries, multi-national corporations with their financial and political sponsorship of the Games and the athletes how do global politics and global economies come into play for local people, their economies, and their social life. This course will explore the local impact that hosting the Olympic games has on local populations as well as the ways communities react and respond to the Games. This course will be taught as part of the Pitt at the Olympics summer intensive study abroad program.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1746 - THE OLYMPICS & IDENTITY - RACE, GENDER, ETHNICTY & THE NATION STATE

Minimum Credits: 3
Maximum Credits: 3
The Olympic Games are and have been more than a sporting event that has captured the imagination and dedication of a global audience for over 100 years. This course explores the ways in which the Olympic games have become a venue to not only showcase sport but to teach, inform and establish norms around some of society's core concepts. This course will demonstrate the ways in which our everyday understanding of gender, race, ethnicity, biology, and citizenship have been directly shaped due to the Olympic games. The Olympic games have been a steady partner with the development of nationalism, globalization, modernity and science. Topics such as gender verification testing, biological racism and citizenship will be discussed as part of the Olympic program. This course will be taught as part of the Pitt at the Olympics Summer Intensive Study Abroad Program.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1747 - WRITING CULTURE

Minimum Credits: 3
Maximum Credits: 3
This class will introduce students to different anthropological and ethnographic writing styles and theoretical approaches while encouraging them to think about what anthropology can contribute to our understanding and appreciation of human diversity in the world today. Students will "try on" different writing styles and theoretical approaches. Throughout the class they will examine the poetics (writing style) and politics (forms of power) associated with different approaches and types of ethnographic writing. Class readings include different types of anthropological writing. This includes empirical writings (e.g., structural-functional ethnographic realist writing) that characterized much anthropological work through the 1960s; interpretive works, influenced by Clifford Geertz; a range of experimental, reflexive, and critical writings of and since the "experimental moment" of the late 1980s; and feminist ethnography and fictional ethnography (or ethnographic fiction). Additional readings provide wider context and writing/study tips.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ANTH 1750 - UNDERGRADUATE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This seminar brings together all undergraduate majors in anthropology for a seminar on the methods by which cultures around the world change over time. Defining such methods occupies much of any anthropologist's time, be he or she an ethnographer, archaeologist, physical anthropologist or linguist. The seminar therefore examines this central problem from many perspectives and affords the student ample opportunity for personal expression as well as rewarding discussion and research in a peer group environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Requirement Course

ANTH 1751 - PEOPLE AND ENVIRONMENT IN AMAZONIA

Minimum Credits: 3
Maximum Credits: 3
This course introduces the complexity of relationships among environment, indigenous populations, and Western society in the Amazonian region of South America from historical and ecological perspectives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1752 - ANTHROPOLOGY OF FOOD

Minimum Credits: 3
Maximum Credits: 3
This course surveys the general subject of culinary anthropology. Topics include food exchanges and the construction of social groups, food and social boundaries, food taboos, symbolism of food, folk conceptions of food, sacrifice and food in religious contexts, world standardization of food preferences. Thus, the focus is on social aspects of food, eating, and exchange.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1755 - URBAN ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course outlines the origins and evolution of cities and explores their roles within their historical, social, and cultural contexts. It examines the nature of life in cities cross-culturally from the perspective of the inhabitants. Features associated with urban life--such as migration, squatter settlements, family organization, ethnicity, social stratification, social networks, and social pathologies- receive special attention.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies, Writing Requirement Course

ANTH 1756 - ECONOMIC ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course reviews the development of economic anthropology as a special field of study. Emphasis is placed on economic change and the impact of industrialization on the third world. Ethnographic examples are drawn from Latin America, Africa, Asia, Oceania, and Europe. Topics to be discussed include economic theory in anthropology, exchange and the origin/use of money, the development of wage labor, marketing and commodity production, theories of economic development and underdevelopment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

ANTH 1759 - CHINESE SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course deals with traditional and modern Chinese society, before and after the 1949 communist revolution. Topics covered include: family and kinship, marriage, community organization, agriculture and industry, gender roles, social stratification, religion, land reform and collectivization, and the cultural construction of a new socialist system. Films, slides, and media presentations supplement lectures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1760 - ANTHROPOLOGY OF LAW

Minimum Credits: 3
Maximum Credits: 3
This course examines anthropological analyses of law and law-like phenomena in a number of societies, including the United States. Particular attention is given to the various ways that disputes are resolved in different social and cultural settings, and to the theoretical analyses used to explain these differences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1761 - PATIENTS AND HEALERS: MEDICAL ANTHROPOLOGY 1

Minimum Credits: 3
Maximum Credits: 3
This course surveys the field of medical anthropology and its history within the discipline of anthropology as a whole, from the perspective of social-

cultural theory. Topics dealt with include ethnomedicine, ethnographic cases, cross-cultural studies of healing practices and connections between medicine and religion. Reference is also made to applied research in contemporary situations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Global Studies

ANTH 1762 - HUMAN ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course explores the ecology of the human species. We will study how humans adapt to their physical and cultural environment, and the interrelationships between people and the environment. Topics discussed include evolution and adaptation, population growth and regulation, foraging and subsistence strategies and production decisions, population interactions and resource management, and energy and human society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1763 - FIELD METHODS

Minimum Credits: 4
Maximum Credits: 4
This course is designed to acquaint students with basic ethnographic fieldwork techniques. Topics addressed include taking and managing fieldnotes on participant-observation, systematic or structured interviews, behavioral observation, and use of archival materials. There will also be some discussion of the relationship between research design, data collection, and data analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ANTH 1764 - CULTURES AND SOCIETIES OF INDIA

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the cultural history of India and to the culture and society of the modern country, concentrating on the description and analysis of modern Indian society. Topics to be covered include caste, kinship and marriage, village communities, law and society and politics in modern India.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1768 - CULTURES AND SOCIETIES OF EASTERN EUROPE

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the socialist countries of eastern Europe apart from the soviet union. It is particularly concerned with how the region has developed under socialism and with how the new, socialist societies have affected the different indigenous cultures. Topics include industrialization and transformation of agriculture, kinship and family, among others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1770 - KINSHIP AND THE FAMILY

Minimum Credits: 3
Maximum Credits: 3
In this course Western and Non-western forms of kinship, family, and marriage will be discussed and analyzed. Special attention will be given to the history of European marriage, to family organization and industrialization, and to women's relation to kinship and family order. The differences in European and Non-European reactions to industrialization will be compared in some detail. Europe, China, India, and Japan will receive special attention.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1771 - RELIGION AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
Religion is thought, felt, and acted out in social and cultural contexts. The relationship between religion and culture is the focus of the course. The objectives are to understand religion wherever and whenever found, and to understand the anthropological approach in the cross cultural study of religion. Religious belief, ritual, myth, dogma and religious specialists in industrial and non-industrial societies are compared.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Global Studies, Russian & East European Studies

ANTH 1773 - CULTURES OF MESOAMERICA

Minimum Credits: 3
Maximum Credits: 3
A general survey of problems and cultures of Mexico and Guatemala from the time of the Spanish conquest to the present. The course will be divided into three parts; MesoAmerica at the time of the arrival of the Spaniards; the colonial transformation of the Indian population; and the contemporary position of the Indians within the Pluri-Ethnic societies of which they are part.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1774 - PERSPECTIVES ON RELIGION

Minimum Credits: 3
Maximum Credits: 3
A serious introduction to the study of religion is undertaken by reviewing the efforts and insights of the principal scholars in the field in the modern period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ANTH 1775 - APPLIED ANTHROPOLOGY

Minimum Credits: 3
Maximum Credits: 3
Viewing applied anthropology as a possible career choice, this course will define the field, contrast it with basic anthropology, examine the concept of policy analysis, and survey the kinds of applied anthropology conducted within the realm of cultural anthropology (urban, education, community development, etc.). Methods and techniques used in applied anthropology will be reviewed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1776 - MYTH, SYMBOL AND RITUAL

Minimum Credits: 3
Maximum Credits: 3

A comparative examination of the myths, symbols, and rituals of different cultures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Writing Requirement Course

ANTH 1778 - CULTURES OF AFRICA

Minimum Credits: 3
Maximum Credits: 3
This course explores the traditional cultures and societies of Africa from prehistoric to modern times. Emphasis is on the conditions prior to contemporary changes but some attention is given to modern developments. Concern is with the variety of cultures on the continent, how people make a living, what family life is like, how disputes are settled, and religion. Through lectures, films, and readings, the student gets a feeling for life in this fascinating part of the world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1784 - JAPANESE SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to contemporary Japanese culture and social institutions. Using scholarly books, essays, fiction and film, it will give students a range of different exposures to various aspects of Japanese society and everyday life: economic miracle, recession, middle class society, gender relations, sexuality, education, consumerism, and mass culture. The special focus of the course will be popular culture in japan. We will review the postwar history of popular culture and consider the reasons for its recent appeal abroad.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1786 - CULTURES OF THE PACIFIC

Minimum Credits: 3
Maximum Credits: 3
This course examines the traditional and contemporary peoples and cultures of the pacific islands. A geographical and historical review of the region is included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ANTH 1787 - SPECIAL TOPICS IN CULTURAL ANTHROPOLOGY

Minimum Credits: 1
Maximum Credits: 4
This course will be on a topic in the area of specialization of a visiting scholar yet to be determined.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Writing Requirement Course

ANTH 1789 - AFRICAN AMERICAN FOLK CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course will explore several aspects of African American folk culture being defined as non-elite expressions of art, music, dance, theatre,

literature, humor, material culture, and religious beliefs. Particular attention will be given to the role of folklore in the perpetuation and transmission of shared cultural knowledge among blacks in the United States.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ANTH 1793 - ASIAN MEDICAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Using scholarly texts, ethnographic studies and historical documents, this seminar will focus on the medical systems of India, china, Japan, and South East Asia. The primary objective of the course is to understand various Asian medical systems on their own terms, both in theory and in contemporary practice. Primary attention will be given to Ayurveda, Unnani and traditional Chinese medicine. We will look at how so-called traditional medicine in Asia is being modernized in response to political, economic, social, and cultural transformations.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Asian Studies, Writing Requirement Course

ANTH 1797 - MOUNTAINS AND MEDICAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
India is a social, political and economic environment in which a broad range of South Asian medical systems have grown and developed over the course of several years. In the past 150 years these systems have been institutionalized and professionalized within the framework of colonial and national medical and public health policy. Many of these systems are intimately connected to the environment, and to the conceptualization, categorization, production and consumption of natural resources. This course focuses on non-biomedical systems of medicine: Ayurveda, Unani, siddha, Tibetan medicine, yoga and nature cure and homeopathy, as each one of these is supported and regulated by the government of India. The purpose of the course is not to evaluate the effectiveness or medical value of these systems; it is to understand how these medical systems fit into a range of social, political, ecological, botanical and economic contexts. Given that a number of these medical systems are intimately linked to Himalayan botanical and environmental knowledge, the course will focus on the relationship between South Asian medical systems and mountain ecology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1798 - RELIGION AND ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
The Himalayas have inspired more religious thought, given rise to more forms of religious practice and are more distinctively featured in a spectrum of epic religious literature, than almost any other geographic region in the world, with the possible ' but unlikely `exception of a small parcel of relatively dry hilly ground between Jerusalem and mecca. In any case, Siddhartha Gautham was born and taught in the shadow of the lower Himalayas, where Buddhism emerged in the 4th century BCE. Many specific mountains, lakes and rivers, as well as the broader geography of the Himalayas ' most notably sacred rivers ' define the landscape of Hindu mythology, pilgrimage and ritual. The practice of yoga as a metaphysical philosophy is intimately linked to the idea of mystical Himalayan masters. The Western watershed of the Punjab, including the iponymous five rivers ' Indus, Jhelum, Chenab, RAVI and Sutlej ' is the heartland of Sikh cultural and religious identity. In addition to being a center of medieval Hindu literary learning, Kashmir and the Western Himalayas, extending through the Hindu Kush, have defined routes of exchange, communication, conversion and confrontation between Greeks, Persians, Buddhist monks, and Mongol armies. More recently ' in terms of centuries ' Tibetan Buddhism has emerged out of a history of development in Lhasa ' relocated to McLeod Ganj in the early 1960s '- that combines elements of tantra from the southeastern Brahmaputra region with transmutations of Buddhism that have taken shape in greater china. Although not inspired by the Himalayas per se, Islam in South Asia has been shaped by geography and the environment in specific ways, and the development of a particular interpretation of the Koran in a small center of learning in the town of Deobandi ' close to where the epic battle of the Bhargava Gita is said to have been waged in Kurukshetra ' implicates the geography and geopolitics of the Himalayas in the emergence of reform oriented, Orthodox Islam.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1799 - HIMALAYAN POLITICAL ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
The Himalayan region is characterized by dramatic climatic and geological variation, a tremendous range of biodiversity and a complex ecology. Within the region there is also profound cultural variation. This course seeks to provide a critical perspective on the ecology and environment of the Himalayas by examining how different groups at the village, state, national and international level are implicated in the political ecology of the mountains. We will look at the way in which village farming communities use natural resources, what kind of pressure is put on resources as a result of development and population growth, how the mountain environment shapes the politics and resource distribution at the level of the state and, finally, how environmental and energy issues shape national policy and international relations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1801 - HIMALAYAN BIODIVERSITY

Minimum Credits: 3
Maximum Credits: 3
Ranging in altitude from several hundred meters above sea level to over seven thousand, from subtropical forests to high altitude meadows and deserts, and from areas with little or no rainfall to regions that are among the wettest in the world, the Himalayas define a geographical region of enormous geological variation and biodiversity. The goal of this course is to gain an understanding of this diversity, with a focus on ecology. More specifically we will examine ecology and ecosystems in terms of biosemiotics ' how and why organisms within an ecological niche communicate with one another, and how these patterns and structures of communication define different kinds of interdependence. Within the framework of standard classificatory schemes ' mammals, birds, reptiles, insects ' we will focus on particular species and specific niche systems for more detailed biosemiotic/behavioral analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ANTH 1803 - HEALTH ISSUES IN WEST AFRICA

Minimum Credits: 3
Maximum Credits: 3
Health as per the World Health Organization is viewed from a bio-psychosocial perspective. This course, which concerns itself with health issues in Africa with special reference to Ghana focuses largely on the social aspects of health. It uses sociological lenses to examine mental disorder. It introduces the student to the major health issues and discourses in Africa with particular emphasis on Ghana. It introduces the student to the ways social theories inform our understanding of health. The course examines how socio-cultural factors contribute to the development of health and ill-health in Ghana and Africa as a whole. This course is suitable for students in Pre-Med, Public Health, Social Work and students in International Development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ANTH 1900 - INTERNSHIP IN ANTHROPOLOGY

Minimum Credits: 1
Maximum Credits: 6
Working in consultation with faculty, advanced students wishing to pursue careers in anthropology have the opportunity to extend academic training to a practical work experience in a particular subfield of Anthropology. Students will be required to submit a preliminary proposal to a faculty sponsor preferably sometime during the prior term, or should respond to faculty listings of specific internship projects that will be posted. Examples of projects are: physical anthropology research at the Pittsburgh Zoo; analysis of archeological artifacts; local ethnographic or folklore research.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

ANTH 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows qualified students to develop highly personalized research projects in conjunction with a faculty sponsor. The student will have to develop a bibliography, outline an approach to the project, and devise a methodology. The project work products are agreed to by the student and the faculty sponsor. Typical products may be a report, paper, or other tangible result of the student's efforts.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ANTH 1902 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ANTH 1903 - DIRECTED RESEARCH-READINGS

Minimum Credits: 1
Maximum Credits: 3
Not all topics in anthropology can be adequately addressed in formal courses. The reading course allows qualified students to develop a bibliography for a specific topic not covered by other courses in the department. The work is done in conjunction with a faculty sponsor, and the student and faculty sponsor jointly determine the work products for the course, a research paper or annotated bibliography based upon the readings is typical, but other products may be substituted.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Arabic

ARABIC 0101 - MODERN STANDARD ARABIC 1/EGYPTIAN 1

Minimum Credits: 5
Maximum Credits: 5
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies

ARABIC 0102 - MODERN STANDARD ARABIC 2/EGYPTIAN 2

Minimum Credits: 5
Maximum Credits: 5
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0141 or ARABIC 0101; MIN GRAD 'C'
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement

ARABIC 0103 - MODERN STANDARD ARABIC 3/EGYPTIAN 3

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0142 or ARABIC 0102 (Min Grade 'C')
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement

ARABIC 0104 - MODERN STANDARD ARABIC 4/EGYPTIAN 4

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0143 or ARABIC 0103 (Min Grade 'C')
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement

ARABIC 0105 - MODERN STANDARD ARABIC 5/EGYPTIAN 5

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0144 or ARABIC 0104 (Min Grade 'C')

ARABIC 0106 - MODERN STANDARD ARABIC 6/EGYPTIAN 6

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0145 or ARABIC 0105 (Min Grade 'C')

ARABIC 0121 - MODERN STANDARD ARABIC 1/LEVANTINE 1

Minimum Credits: 5
Maximum Credits: 5
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARABIC 0122 - MODERN STANDARD ARABIC 2/LEVANTINE 2

Minimum Credits: 5
Maximum Credits: 5
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0151 or ARABIC 0121; MIN GRAD 'C'
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement

ARABIC 0123 - MODERN STANDARD ARABIC 3/LEVANTINE 3

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0152 or ARABIC 0122 (Min Grade 'C')
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement

ARABIC 0124 - MODERN STANDARD ARABIC 4/LEVANTINE 4

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0153 or ARABIC 0123 (MIN GRADE 'C')
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement

ARABIC 0125 - MODERN STANDARD ARABIC 5/LEVANTINE 5

Minimum Credits: 4
Maximum Credits: 4

Modern standard Arabic 1/Levantine 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0154 or ARABIC 0124 (MIN GRADE 'C')

ARABIC 0126 - MODERN STANDARD ARABIC 6/LEVANTINE 6

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0155 or ARABIC 0125 (MIN GRADE 'C')

ARABIC 1115 - READINGS IN ARABIC

Minimum Credits: 3
Maximum Credits: 3
This course improves the proficiency of students of Arabic at the high intermediate level and above through reading and discussion of authentic Arabic texts. These texts will include both fiction (e.g. Excerpts from novels, short stories, etc.) And non-fiction (e.g. Newspaper articles, essays, political speeches, etc.) And will cover major areas of interest in Arabic writing, be they political, social or literary, and reflect the opinions of major Arabic authors on these issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0143 or 0153 or ARABIC 0103 or ARABIC 0123 (MIN GRADE 'B'); CREQ: LING 0144 or 0154 or ARABIC 0104 or 0124 (MIN GRADE 'B'); PROG: Dietrich Sch Arts and Sciences

ARABIC 1615 - ARABIC LIFE AND THOUGHT

Minimum Credits: 3
Maximum Credits: 3
The primary objective of the course is to introduce students to the cultures of the Arab world in order for them to understand the Arab character apart from stereotypes. The course will also examine the wide variety of ethnicities that are summarily defined as Arab. The main foci of the course will be the understanding of the contemporary Arab mind, the experiences that shaped it, and how Arabs convey it.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARABIC 1620 - ARAB CINEMA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARABIC 1635 - INTRODUCTION TO MODERN ARABIC LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ANY ENGCMP COURSE
Course Attributes: African Studies, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ARABIC 1645 - GLOBAL ISSUES IN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course is a great way to explore different cultures and understand modern global issues through reading the literature produced by different nations. This course traces topics of global impact in the fiction of countries around the world. The authors we will be discussing come from African, European and Asian cultures. The focus of the course will change from semester to semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARABIC 1705 - INTRODUCTION TO ARABIC LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
In the first half of this course, students will learn about the linguistic structure of modern standard Arabic and related dialects with a special focus on the phonology, morphology and syntax. Material in the second half of the course will focus primarily on social issues related to the Arabic language including discourse, dialectology and language variation, diglossia and language contact.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

ARABIC 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARABIC 1905 - UNDERGRADUATE TEACHING ASSISTANT IN ARABIC

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARABIC 1909 - SPECIAL TOPICS IN ARABIC

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0133 or 0143 or 0153; PROG: Dietrich Sch Arts and Sciences

Architectural Studies

ARC 0110 - APPROACHES TO THE BUILT ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
This foundational course for architectural studies majors seeks to acquaint students with contemporary ideas that affect our understanding of the built environment across the globe through a series of units dealing with different architectural issues and building types. The course engages in intensive reading of canonical texts in the field and current studies of issues shaping the built environment today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 0112 - ARCHITECTURE OF THE PRE-MODERN WORLD: A GLOBAL PERSPECTIVE ON BODIES, BUILDINGS, AND IMAGINATIONS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARC 0114 - ART AND ARCHITECTURE OF THE MUSLIM WORLD

Minimum Credits: 3
Maximum Credits: 3
This course examines the art and architecture of the Muslim world as it developed through centuries of adoption, adaptation, and innovation which emerged as Islam spread throughout Eurasia, and Muslim communities came into contact with other Muslim and non-Muslim societies. Focusing on a number of prominent sites, buildings, and art objects, this course introduces students to the plurality of traditions and artistic practices labeled as Islamic Art and Architecture. Furthermore, students will learn about various sources of influence that came from the center and peripheries of the Muslim world. Exploring these concepts will take the class on a journey through time and space: starting in the 7th-century from the birthplace of Islam in the Arabian Desert, we will move through a vast territory that expands from southern Spain to China, with a final stop in 21st-century Dubai. All along the way, buildings and art objects will serve as snapshots that open a window into the social, cultural, economic, and political life of these Muslim societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ARC 0116 - MODERN ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
The development of architecture in Europe and America from around 1800 to the present, involving a number of revolutionary changes; the appearance of many new building types, the availability of new materials produced by industry, the transformation of structural design by technology, and the emergence of strikingly new ideas about how a building should be conceived.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ARC 0150 - INTRODUCTION TO WESTERN ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
Introduces students to the conscious observation and analysis of architecture and to a broad survey of the major masterpieces of architecture in Western civilization. Formative concepts behind the designs, structural principles involved in the construction, and societal values promoted and reinforced by the formal character of buildings will be considered along with the analysis of style. Required for the architectural studies major and recommended as a beginning course for others interested in architecture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 0153 - MEDIEVAL ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
This course will examine the development of architecture in Europe and the Mediterranean from about 300 to 1500 CE, with a focus on the medieval reception and transformation of design elements inherited from the ancient world. It will focus primarily upon buildings designed for Christian rituals, especially churches, cathedrals, and monasteries, but there will also be some attention given to Jewish and Islamic structures, as well as the surviving evidence for secular buildings such as castles and town halls; at the end of the semester we will also devote some time to thinking about the

reception of medieval architecture in famous Pittsburgh buildings such as Allegheny Courthouse, Heinz Chapel, and the Cathedral of Learning. Lectures will focus on the social and political background of these structures as well as their ritual and aesthetic purposes; we will also delve into questions about the contemporary care and upkeep of medieval buildings, particularly regarding the ethical management of places that serve as "museums" in some sense and are also active sites of worship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ARC 0177 - FRANK LLOYD WRIGHT

Minimum Credits: 3
Maximum Credits: 3
This course will deal with the life of the man who was America's greatest architect and one of the principal world figures in the art of building in the Twentieth Century. The lectures will treat his formation as an architect as well as the development of his career and will focus upon a theoretical analysis of wright's work in comparison with that of his great contemporaries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Architectural Studies

ARC 0182 - THE CITY OF ROME AND ITS ARCHITECTURE: FROM AENEAS TO ZAHA HADID

Minimum Credits: 3
Maximum Credits: 3
In this course we will have the absolute pleasure of studying the city of Rome through time and space. We will start with the city's mythical and legendary founding by Aeneas nearly three millennia ago and work our way through contemporary Rome. Focal points will include: the Augustan principate during the Roman Empire, the building and urban planning of the Baroque popes, Mussolini's "Third Rome," and the contemporary city of Renzo Piano and Zaha Hadid. It is important to note that this course aims to present a fuller and richer examination of the lived experience in the city of Rome through time. Recent archaeological work has shed tremendous light on the living and working conditions within city from antiquity to the present day.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 0201 - FOUNDATIONS STUDIO 1

Minimum Credits: 6
Maximum Credits: 6
The architectural studies seminar is intended to provide experience working on an advanced level with a specialized topic in architecture. In some years the seminar will deal with history or theory, in others with conceptual issues. For this offering it will focus on several particular problems in the development of Frank Lloyd wright's career in architecture.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Capstone Course

ARC 0210 - SPECIAL TOPICS-ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
Special topics in architecture. Course varies from term to term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ARC 0201 or HAA 1913

ARC 0300 - INTRODUCTION TO HISTORIC PRESERVATION

Minimum Credits: 3
Maximum Credits: 3

This course explores the goals, methods, and practice of historic preservation in the United States through a variety of historical, theoretical, and practical points of view. Through intensive reading, class discussion, field trips, case studies, and guest speakers representing various sectors of the preservation community in Pittsburgh, the course investigates such topics as: (1) the influence of historic preservation in the built environment; (2) philosophies and politics of preservation; (3) 'reading' buildings and landscapes for their cultural meanings; (4) protecting historic places and documenting their significance.*
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Arts and Sciences (ARTSC)

ARC 0901 - ARCHITECTURAL STUDIES PROSEMINAR 1

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

ARC 0902 - ARCHITECTURAL STUDIES PROSEMINAR

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

ARC 1118 - ARCHITECTURE SINCE 1945

Minimum Credits: 3
Maximum Credits: 3
Treats the key developments in architecture throughout the world since World War II, including theory as well as practice. The course will focus on such figures as Frank Lloyd Wright, Miles van der Rohe, le Corbusier, James Stirling, Eeko Saarinen, Louis Kahn, Kenzo Tange, Robert Venturi, Richard Rogers, and Norman Foster.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ARC 1136 - EARLY AMERICAN ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
Architecture often serves as a prime document and indicator of America's past and future. The theme of this course is the search for identity in American architecture in the centuries from the colonial settlements to the Civil War. The course studies both the recorded history of American architecture and the unrecorded millennium before that, to show its surprising cohesion in the fact of great cultural and territorial diversity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1137 - AMERICAN ARCHITECTURE SINCE INDUSTRIALIZATION

Minimum Credits: 3
Maximum Credits: 3
By 1880 traditional American architectural values had broken down under a barrage of ornament and imported European styles. But at the same moment a new American architecture was taking shape to express the new wealth of post-Civil War America and its new social order. The next hundred years would see a succession of brilliant architects in Sullivan, Wright, Mies, Johnson and the pluralists of today. These individual successes only partially mask some major problems; both constitute the underlying themes of this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1152 - ROMAN ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
The course will examine the development of Roman architecture from its origins in Etruria and Central Italy to the Middle Empire (ca. 150 AD). Special attention will be given to the relationship of architectural forms, types and functions to changes in Roman politics and society and the significance of materials and outside influences on the development of local Italian traditions and forms. The interaction between Roman architectural forms and local traditions in the provinces to create a Roman imperial "Koine" will be treated only in passing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Architectural Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARC 1153 - EARLY CHRISTIAN AND BYZANTINE ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
This course on early Christian and Byzantine architecture balances modern scholarship on the origins and development of church-building with a conceptual study of what worship is and how it has been housed. Individual topics of study vary from Rome and Constantinople, to "underground" churches, to the splendor of the basilicas built for Constantine and Justinian. Field trips to analyze a church and synagogue service complement the lectures and readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1154 - CONSTRUCTING THE GOTHIC

Minimum Credits: 3
Maximum Credits: 3
Treats the development of gothic architecture from the beginning, in 1140, to the death of St. Louis, in 1270, with emphasis on Northern France. Focuses on liturgical requirements, structural rationale, stylistic formulation, and decorative programs. Includes analysis of major documents.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

ARC 1156 - HIGH RENAISSANCE ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
The architecture of the high Renaissance and mannerism (from about 1500 to about 1580 in Rome and other centers of Italy) changed forever the face of architecture. This course focuses on the Roman projects of Bramante, Raphael, Michelangelo and Leonardo da Vinci. It then follows the mutation of high Renaissance ideals into mannerism and the spread of both styles in Northern Italy, particularly in town planning and in the villas and churches of Andrea Palladio around Venice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

ARC 1158 - ARCHITECTURE AND ENLIGHTENMENT

Minimum Credits: 3
Maximum Credits: 3
This course will examine architecture, city planning, interior design, and gardening in eighteenth-century Europe as the product of social, industrial, administrative, and intellectual transformations that began to radically challenge traditional spatial configurations and conventional approaches to building. In cosmopolitan centers like London and Paris, an unprecedented explosion of print media, rapid rises in literacy, and the development of a public sphere outside official power structures opened debate in the arts to previously marginal figures. A range of new voices thus emerged that impacted policy decisions in the urban realm and proffered advice and guidance in thinking about aesthetics and artistic production. The rise of science held out the possibility that cities and institutions could be reshaped to improve human welfare through better hygiene and the expansion of commerce. Influential new classes defined by wealth or specialized knowledge generated the creation of building types for a range of new activities. Elite domestic space in particular reflects a wholesale transformation of social priorities motivated by the novel concept of privacy. Narrowly defined

Renaissance discourses on the arts founded exclusively on the model of ancient Rome collapsed under an avalanche of data gathered in remote sites around the Mediterranean and through contact with more far-flung civilizations around the world. New intellectual paradigms reconfigured the relationship between individual and nature, between modern present and historical past. Consequently, the purpose of architecture mutated in the course of the eighteenth century as a bewildering range of new possibilities for shaping building and reshaping social relations were explored. Well before political revolution rocked European governments and toppled traditional hierarchies, the built environment served as a laboratory for experimentation and as a forum for reimagining society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1160 - ARCHITECTURE: IMAGE, TEXT, THEORY

Minimum Credits: 3
Maximum Credits: 3
This course treats the historical development of aesthetic theories employed in the conception of architectural design through the course of Western civilization. It focuses on Vitruvius in antiquity, the re-writings of Vitruvius in the renaissance, and the key theorists - both moralists and rationalists - of the modern era (including Ruskin, Viollet le-Duc, Le Corbusier).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: HAA 0040 or ARC 0150; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) PLAN: Architectural Studies (BA or BS) or Design Minor
Course Attributes: Capstone Course, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies, Writing Intensive Course (WRIT)

ARC 1161 - MODERNITY, MODERNISM AND HOUSING

Minimum Credits: 3
Maximum Credits: 3
This course offers multiple perspectives on architectural modernism and modernity through the perspective of dwelling. We will consider examples of modern architecture from the Americas, Europe, Africa, the middle East and Asia from the late 19th century (starting with the debates regarding tenements in this country and working-class housing in England) and end with the demolition of the Pruitt-Igoe housing projects in St. Louis in 1972. The lens of housing will allow us to consider modernism in different geographic contexts (East and West); under different political conditions (in the colonial periphery, in the heart of empire, as part of state-sponsored redevelopment projects, and as part of the nation-building process in the developing world) and through a range of theoretical vectors (i.e. The modernist house as a manifesto for a new way of living; the attention received by vernacular building traditions and various schemes to replicate them as part of the modern project; the role of post-war technology in prefabricated housing; and the role of museums, such as the MOMA and other institutions such as the united nations in calcifying modernism in various locales around the world). This course is designed to give students a strong foundation in the theoretical, aesthetic and historical expressions of architectural modernism. It is also designed to expand the range of architectural modernism beyond the traditional Euro-Ameri-centric canon to include alternative modernisms across global geographies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1180 - WORLD CITIES

Minimum Credits: 3
Maximum Credits: 3
This course establishes a set of issues and a chronological context through which to understand the main patterns of city development. Thus the paring of St. Petersburg and Brasilia, London and loss Angeles, Amsterdam and Chicago, points out similarities and differences in their shape and social context. Student reports on individual cities are an integral element of the course, and influence the choice of cities to be studied in detail.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Architectural Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Urban Studies, West European Studies

ARC 1181 - PITTSBURGH ARCHITECTURE/URBANISM

Minimum Credits: 3
Maximum Credits: 3
The course studies the physical environment of Pittsburgh; the topography, early settlement, the expansion of its industrial center, the post-war renewal, and the current shift from production to a service-based economy. A parallel study in the architectural history of Pittsburgh focuses on

images of individual buildings from fort Pitt to the new skyscrapers. Student papers either expand research in building categories (industrial, domestic, etc.) Or integrate the physical development of the region with its political and social history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1183 - DIGITAL ROMAN AFRICA: VISUALIZING ARCHITECTURE AND URBANISM IN ROMAN NORTH AFRICA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ARC 1191 - ARCHITECTURE AND THE CITY IN CENTRAL EUROPE: 19TH AND 20TH CENTURIES

Minimum Credits: 3
Maximum Credits: 3
This course will enable students to investigate the modernization of three important central European cities and the impact of new ideas about design, technology, and social organization on the development of new building types and urban infrastructure in the 19th and 20th centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

ARC 1201 - ARCHITECTURE DESIGN STUDIO 1

Minimum Credits: 6
Maximum Credits: 6
At the core of every nationally accredited school of architecture is the design studio. The design studio integrates skills learned in other architecture courses in the production of a design project. This course prepares students for the rigor of the architectural design process and exposes them to the unique pedagogical experience of a design studio. This course is designed to give students who are majoring in architectural studies and who intend to pursue a professional degree in architecture at the graduate level exposure to a sophisticated conceptual framework for thinking about three-dimensional composition and architectural problem solving. The course is also intended to emphasize the necessity of excellent graphic skills and technical skills in model-making to communicating design ideas. This course is meant to serve as an intermediary step between the /architectural studies seminar/ (HAA 1913) and the studio arts requirements for the architectural studies major, and the more advanced architectural design work in HAA 1917.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ARC 0201

ARC 1202 - ARCHITECTURE DESIGN STUDIO 2

Minimum Credits: 6
Maximum Credits: 6
This course is designed to give students who are majoring in architectural studies and who intend to pursue a professional degree in architecture at the graduate level exposure to a sophisticated conceptual framework for thinking about three-dimensional composition and architectural problem solving known as /system-based design/. The course is also intended to emphasize the necessity of excellent graphic skills and technical skills in model-making to communicating design ideas. This course is meant to serve as a capstone for the architectural studies major.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ARC 1201

ARC 1203 - DESIGN STUDIO 3

Minimum Credits: 6
Maximum Credits: 6
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1204 - DESIGN STUDIO 4

Minimum Credits: 6
Maximum Credits: 6
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1310 - PRESERVATION - TEXTS AND THEORY

Minimum Credits: 3
Maximum Credits: 3
This course is the capstone writing seminar for architectural studies majors pursuing the track in preservation planning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ARC 1320 - DOCUMENTATION AND CONSERVATION STUDIO

Minimum Credits: 6
Maximum Credits: 6
This course is intended to provide an intensive foundation in the proper techniques of working in the field of architectural conservation. Primary emphasis is on learning directly from specific buildings and sites, with secondary emphasis on placing these findings within a practical preservation planning context. Background knowledge for analysis and for developing preservation recommendations will come from intensive reading, guest speakers, case studies, class discussions, field trips and exercises in building materials conservation. Concurrent with the development of approaches to conservation, students will also acquire or sharpen a variety of academic skills such as the ability to conduct historical research; graphic representation techniques; and professional writing and public presentation skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ARC 1330 - GLOBAL PRESERVATION

Minimum Credits: 3
Maximum Credits: 3
The late-nineteenth and early-twentieth century debates regarding the role of the architectural monument as a signifier of the past, as a container of memory and more importantly authenticity, were the definitive moment in the institutionalization and professionalization of architectural preservation around the world. In a 1903 essay titled 'The Modern Cult of Monuments,' art historian Alois Reigl claimed that while the creation of monuments (i.e. structures built to memorialize certain events or persons) had a long history that predates modernity, the 'cult of the monument' (i.e. the allocation of the monument as a unique and original object in a pre-ordained historical narrative of social and cultural evolution) came about as recently as the nineteenth-century. It is this coupling of the advent as well as the progress of modernity along with the formalization of systems of historic preservation that this course seeks to explore.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

ARC 1901 - UNDERGRADUATE TEACHING ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 3
This course enables advanced majors to partner with a faculty member as a teaching assistant in a pre-existing departmental course. This collaborative project will result in the enrichment of the course and improve the teaching-learning enterprise for all parties (faculty, Undergraduate teaching assistants, and students enrolled in the course).

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARC 1901 - UNDERGRADUATE TEACHING ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 3
This course enables advanced majors to partner with a faculty member as a teaching assistant in a pre-existing departmental course. This collaborative project will result in the enrichment of the course and improve the teaching-learning enterprise for all parties (faculty, Undergraduate teaching assistants, and students enrolled in the course).
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARC 1911 - ARCHITECTURE AND DIGITAL MEDIA 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to the graphic communication of architectural documents utilizing computer aided drafting (CAD) techniques. This introductory cad course is designed to give students a working knowledge of the AutoCAD drafting system. The course has been designed to better acquaint students with concepts, processes and skills required by professionals in the field to create and modify computer-generated drawings. Students will learn the commands and functions necessary to input, process and output two dimensional working drawings in the form of plans, elevations and sections. Three-dimensional visualization will also be covered as a means to explore massing and proportion. In addition to the fundamental design methods and practices for the creation of architectural drawings, exercises will focus on fundamental concepts such as scaling, dimensioning, annotating as well as maintenance of CAD drawing files through the use of operating system commands.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARC 1912 - ARCHITECTURE AND DIGITAL MEDIA 2

Minimum Credits: 3
Maximum Credits: 3
The architecture, engineering, construction and operations industry has well documented inefficiencies stemming primarily from fragmentation in the project delivery process. At the same time, the industry faces significant challenges such as the demand to deliver projects more economically, the desire for more environmentally responsible projects, and the expectation of more predictability in performance -- all of which call for more integration and collaboration throughout a project's lifecycle. New technologies such as building information modeling (BIM) are revolutionizing architecture and construction, providing a platform that allows project information to be captured, structured and analyzed throughout the entire lifecycle of a project, enabling a more integrated, collaborative process that supports more informed decision making and higher levels of efficiency. In this course, students will learn the principles of BIM using Revit software.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Arts and Sciences (ARTSC)

ARC 1990 - ARCHITECTURAL STUDIES INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
Academic credit is awarded for practical professional experience gained through a directed internship. The internship is arranged by the student through the university internship office in consultation with the director of architectural studies.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Architectural Studies (BA and BS)
Course Attributes: Architectural Studies, Undergraduate Internship

ARC 1999 - SENIOR THESIS

Minimum Credits: 3
Maximum Credits: 3

In this course a senior major in the history of art will research and write a research paper and present it as if for publication. The area and topic will be decided upon in consultation with a specific faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*

Arts and Sciences

ARTSC 0010 - BEING HUMAN IN THE AGE OF COVID-19

Minimum Credits: 1
Maximum Credits: 1
This 1-credit course, sponsored by the Humanities Center, offers an opportunity for students to work closely with a team of faculty mentors to engage the COVID-19 crisis from a deeply humanistic perspective. Students will join a community of professors from a range of humanistic fields in a semester of discussions about our current pandemic moment. They will work closely with faculty members who bring research expertise in public health and the African diaspora; speculative fiction and imagining apocalypse; modern US History, the history of science, and the history of activism; the history of art as it has been shaped by plagues and epidemics; and the history of pandemic literature. We will read, talk and think deeply together about what it means to be human in this time of pandemic, and faculty will help students realize how historical, humanistic research methods can respond to the challenges of the present.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

ARTSC 0020 - LATIN AMERICA AND CARIBBEAN

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide students with substantial knowledge concerning the geography, history, and culture of Latin America and the Caribbean and to introduce them to how issues related to the region are studied from a variety of disciplinary perspectives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 0101 - FIRST APPROACHES TO RESEARCH

Minimum Credits: 1
Maximum Credits: 1
First Approaches to Research is designed to teach students how to connect to research and creative projects across disciplines, interests, and methodologies. Driven by their own curiosities and the search for answers, students will learn the tools needed to launch meaningful undergraduate research careers.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Satisfactory/No Credit

ARTSC 0111 - RIGHT START 1

Minimum Credits: 1
Maximum Credits: 1
This course is designed to enhance the academic skills of new students participating in the student support services project (SSS). The course will use collaborative learning strategies to address such topics as note-taking, problem-solving, time-management, test-taking, and goal-setting. This course is very interactive and will use multiple methods of communication and technology to apprise students of course activities along with upcoming SSS events.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

ARTSC 0112 - RIGHT START TO COLLEGE 2

Minimum Credits: 1
Maximum Credits: 1
You must be a part of the trio student support services (SSS) program to take this course. This course is designed to enhance the level of career awareness of students in the student support services (SSS) program. The course will focus on the following topics: academic majors, resume-writing, interview techniques, professional communication, and career investigation. This course is interactive and will use multiple methods of communication and technology to apprise students of course activities along with upcoming SSS events.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

ARTSC 0113 - RIGHT START TO COLLEGE 3

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ARTSC 0120 - FIRST EXPERIENCES IN RESEARCH

Minimum Credits: 1
Maximum Credits: 2
First experiences in research allows an undergraduate student to learn about and to participate in research with a faculty member outside of regular course requirements. The student receives orientation and training for the research project, an introduction to the research hypothesis, and learns about previous research conducted on the topic to date. The student participates in relevant training workshops. The student meets regularly with the faculty mentor and every other week with other undergraduate student researchers.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Satisfactory/No Credit

ARTSC 0121 - CONTINUING EXPERIENCES IN RESEARCH

Minimum Credits: 1
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 0125 - SPECIAL TOPICS IN RESEARCH

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

ARTSC 0500 - INTRODUCTION TO STUDY ABROAD

Minimum Credits: 1
Maximum Credits: 1
This course explores the study abroad experience. It also addresses the issues of cultural diversity, international understanding and the role of the individual in the global community. The course will inform students of the ways in which study abroad complements and augments their academic program, career goals, and overall personal development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

ARTSC 0600 - ESL EDUCATION

Minimum Credits: 3
Maximum Credits: 15

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 0900 - SEMINAR IN PEER TUTORING

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

ARTSC 1000 - UCIS PROFESSIONAL DEVELOPMENT

Minimum Credits: 1
Maximum Credits: 1
This course provides opportunities for students to establish a career direction and design a strategy for securing a full-time position in today's competitive international and global workplace. Students focus on developing specific competencies that include: career selection, job search activities, resume and cover letter development, professional networking techniques, behavioral interviewing skills and workplace ethics in preparation for government, business, and nonprofit sectors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

ARTSC 1001 - INTERNATIONAL STUDIES - LONDON

Minimum Credits: 3
Maximum Credits: 3
The course aims to emphasize the interconnections between society, economics, politics and the physical environment. This will involve an analysis of British Society in the 20th century, commencing with a review of post war ideology, politics and economics.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1002 - INTERNATIONAL STUDIES - CUBA

Minimum Credits: 3
Maximum Credits: 3
This course is offered as part of the Pitt in Cuba study abroad program to give students an introduction to Cuban culture, religion, race, art, literature, music and society and to provide them with context for their experiences in Havana, Cuba. This course will also familiarize students with the history of Cuba and its often difficult relationship with the United States.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1004 - GLOBAL DIVERSITY

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1017 - CRITICAL ISSUES IN CRIMINAL JUSTICE

Minimum Credits: 3
Maximum Credits: 3
This course is part of the Study Abroad program and will be taught in London, England.

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1018 - GLOBAL WATER POLICY DC STUDY AWAY

Minimum Credits: 1
Maximum Credits: 1
This course is a spring break study away course coordinated by the Study Abroad Office.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1019 - URBAN-RURAL HEALTHCARE IN PITTSBURGH AND BRADFORD STUDY AWAY

Minimum Credits: 1
Maximum Credits: 1
This spring-break study away course is coordinated by the Study Abroad Office.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1020 - LAKOTA PERSPECTIVE PINE RIDGE STUDY AWAY

Minimum Credits: 3
Maximum Credits: 3
This summer study away course is coordinated by the Study Abroad Office.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1021 - PITT IN DC-BRUSSELS STUDY AWAY

Minimum Credits: 3
Maximum Credits: 3
This summer study away course is coordinated by the Study Abroad Office.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1300 - PROJECT BASED TECHNOLOGY DESIGN

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1400 - STUDY ABROAD: MULTI-COUNTRY

Minimum Credits: 1
Maximum Credits: 18
This course is for students who enroll in a Study Abroad program that takes place in multiple countries throughout the academic term.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1401 - ELECTIVE AT VERITAS UNIVERSITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

ARTSC 1402 - ELECTIVE AT VERITAS UNIVERSITY 2

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

ARTSC 1403 - ELECTIVE IN CHINA

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1450 - LONDON FIELD STUDIES

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1455 - YELLOWSTONE FIELD STUDIES

Minimum Credits: 0
Maximum Credits: 0
This course is part of the Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required

ARTSC 1460 - WYOMING FIELD STUDIES

Minimum Credits: 0
Maximum Credits: 0
This course is part of the Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required

ARTSC 1461 - WYOMING STUDIO ARTS

Minimum Credits: 0
Maximum Credits: 0
This course is part of the Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Non-Graded Component

ARTSC 1462 - VIENNA THEN AND NOW

Minimum Credits: 1
Maximum Credits: 3
This course is part of a Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1498 - PUBLIC AND SOCIAL POLICY IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
The interest in studying policy in Latin America and the Caribbean (LAC) has grown in recent decades. Public policy refers to the principles and decisions that guide government actions. Social policy, as a component of public policy, focuses on strategies and programs to guarantee and provide protections for the most vulnerable groups in a society with the goal of achieving equality and equity. Policies are influenced and determined by contextual factors such as international trends, the social fabric, political structures, legal systems, interest groups, and particular situations. This lecture explores public and social policy issues in LAC from three fronts/parts: the region as a unit of study, individual countries, and policy topics. At the beginning, the course reviews policy theory and concepts, as well as the historical, societal, cultural, economic, development, and political contexts of LAC policy. The second front looks at policy issues in individual LAC countries to understand specific conditions that make them relevant and to study policy solutions that could serve as examples on policy making and implementation. The third component explores policy areas such as health, social security, education, employment, poverty alleviation, public administration, environment, food security, at-risk groups, and security. The instructor will offer students a pool of topics to choose from based on their fields of interest and will emphasize those established in the Sustainable Development Goals -- SDGs. In addition to the weekly homework that could be included in their portfolios, students will write final in-depth case-study assignments on a policy issue in a LAC country that could qualify as capstone papers for a LAC Certificate. The Public and Social Policy in Latin America course is mainly intended for advanced undergraduate students interested in careers in international affairs, government, policy analysis, political science, social justice organizations, or related disciplines in LAC. Some Spanish and/or Portuguese reading proficiency would be desirable.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARTSC 1499 - STUDY ABROAD: LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1500 - STUDY ABROAD: EL SALVADOR

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1503 - STUDY ABROAD: CAMEROON

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1505 - STUDY ABROAD: ARGENTINA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1506 - STUDY ABROAD: AUSTRALIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1507 - STUDY ABROAD: AUSTRIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1508 - STUDY ABROAD: BRAZIL

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1509 - STUDY ABROAD: BELGIUM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1510 - STUDY ABROAD: CANADA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1511 - STUDY ABROAD: BOLIVIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1512 - STUDY ABROAD: CHILE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1514 - STUDY ABROAD: CYPRUS

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1515 - STUDY ABROAD: CHINA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1517 - STUDY ABROAD: COLOMBIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1518 - STUDY ABROAD: COSTA RICA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1519 - STUDY ABROAD: CZECH REPUBLIC

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1520 - STUDY ABROAD: SLOVAKIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1521 - STUDY ABROAD: DOMINICAN REPUBLIC

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1522 - STUDY ABROAD: DENMARK

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1524 - STUDY ABROAD: ECUADOR

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1525 - STUDY ABROAD: ENGLAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1527 - STUDY ABROAD: FRANCE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1529 - STUDY ABROAD: GERMANY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1530 - STUDY ABROAD: FINLAND

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1531 - STUDY ABROAD: GREECE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1532 - STUDY ABROAD: GUATEMALA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1533 - STUDY ABROAD: HUNGARY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1534 - STUDY ABROAD: HONG KONG

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1535 - STUDY ABROAD: IRELAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1537 - STUDY ABROAD: HONDURAS

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1538 - STUDY ABROAD: ISRAEL

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1539 - STUDY ABROAD: NORTHERN IRELAND

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1540 - STUDY ABROAD: ITALY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1541 - STUDY ABROAD: JAMAICA

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1542 - STUDY ABROAD: JAPAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1544 - STUDY ABROAD: JORDAN

Minimum Credits: 1
Maximum Credits: 16
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1545 - STUDY ABROAD: KENYA

Minimum Credits: 1
Maximum Credits: 15

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1546 - STUDY ABROAD: LEBANON

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1547 - STUDY ABROAD: SOUTH KOREA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1548 - STUDY ABROAD: LITHUANIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, West European Studies

ARTSC 1549 - STUDY ABROAD: MALTA

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1550 - STUDY ABROAD: MEXICO

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1551 - STUDY ABROAD: MOROCCO

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1552 - STUDY ABROAD: NETHERLANDS

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1553 - STUDY ABROAD: NEW ZEALAND

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1554 - STUDY ABROAD: NORWAY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1555 - STUDY ABROAD: NEPAL

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1556 - STUDY ABROAD: NICARAGUA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1557 - STUDY ABROAD: PANAMA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1558 - STUDY ABROAD: POLAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1560 - STUDY ABROAD: BOTSWANA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1561 - STUDY ABROAD: TAJIKISTAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1562 - STUDY ABROAD: RUSSIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1563 - STUDY ABROAD PORTUGAL

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1564 - STUDY ABROAD: SCOTLAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1565 - STUDY ABROAD: SINGAPORE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1566 - STUDY ABROAD: SPAIN

Minimum Credits: 1
Maximum Credits: 18
Enrollment section for students in the Study Abroad: Spain program
Academic Career: Undergraduate

Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1567 - STUDY ABROAD: EUROPE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1568 - STUDY ABROAD: KAZAKHSTAN

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1569 - STUDY ABROAD: FRANCE AND THE CZECH REPUBLIC

Minimum Credits: 6
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1570 - STUDY ABROAD: SWEDEN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1571 - STUDY ABROAD: SWITZERLAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1572 - STUDY ABROAD: BOLIVIA, MOROCCO, VIETNAM

Minimum Credits: 6
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1573 - STUDY ABROAD: BULGARIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1574 - STUDY ABROAD: TONGA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1575 - STUDY ABROAD: TAIWAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1576 - STUDY ABROAD: TURKEY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1577 - STUDY ABROAD: TASMANIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1578 - STUDY ABROAD: UGANDA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1579 - STUDY ABROAD: AUSTRALIA AND NEW ZEALAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1580 - STUDY ABROAD: THAILAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1581 - STUDY ABROAD: UKRAINE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1582 - STUDY ABROAD: VENEZUELA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1583 - STUDY ABROAD: WALES

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1584 - STUDY ABROAD: VIETNAM

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1586 - STUDY ABROAD: ZIMBABWE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1591 - STUDY ABROAD: FRANCE AND SENEGAL

Minimum Credits: 6
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1593 - STUDY ABROAD: SPAIN AND BONAIRE

Minimum Credits: 6
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1594 - STUDY ABROAD: ENGLAND AND THE NETHERLANDS

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1595 - STUDY ABROAD: TUNISIA

Minimum Credits: 6
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1596 - STUDY ABROAD: KAZAKHSTAN

Minimum Credits: 12
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1597 - STUDY ABROAD: ARGENTINA, SOUTH AFRICA, VIETNAM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1598 - STUDY ABROAD: KYRGYZSTAN

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1599 - EXCHANGE: UNIVERSITY OF EXETER, UNITED KINGDOM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1618 - STUDY ABROAD: INDIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1619 - STUDY ABROAD: EGYPT

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1620 - STUDY ABROAD: ICELAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1621 - STUDY ABROAD: SERBIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1622 - STUDY ABROAD: GEORGIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies

ARTSC 1623 - STUDY ABROAD: GHANA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1624 - STUDY ABROAD: CROATIA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1626 - STUDY ABROAD: TURKS AND CAICOS

Minimum Credits: 12
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1627 - STUDY ABROAD: MADAGASCAR

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1628 - STUDY ABROAD: SAMOA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1630 - STUDY ABROAD: SENEGAL

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies

ARTSC 1632 - STUDY ABROAD: INDONESIA

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1633 - STUDY ABROAD: UNITED ARAB EMIRATES

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1634 - STUDY ABROAD - AZERBAIJIAN

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1635 - STUDY ABROAD: ARMENIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1636 - STUDY ABROAD: PHILIPPINES

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1638 - STUDY ABROAD: TANZANIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1639 - STUDY ABROAD: SOUTH AFRICA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: African Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1641 - STUDY ABROAD: PERU

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1642 - STUDY ABROAD: CUBA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1644 - STUDY ABROAD: BELIZE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Latin American Studies, Non-Pitt Class, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1646 - STUDY ABROAD: FIJI

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1647 - STUDY ABROAD: CAMBODIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ARTSC 1668 - INTERNATIONAL RESEARCH ABROAD PROGRAM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1682IS - RUSSIA ENERGY PROGRAM- IN-STATE

Minimum Credits: 0
Maximum Credits: 0
Non-graded course for in-state tuition.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1682OS - RUSSIA ENERGY PROGRAM- OUT-OF-STATE

Minimum Credits: 0
Maximum Credits: 0
Non-graded course for out-of-state tuition.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1685 - STUDY ABROAD: COMPARATIVE JUSTICE IN IRELAND

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1686 - STUDY ABROAD: CULTURE AND LANGUAGE IN IRELAND OS

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1687 - PITT IN VERSAILLES

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1694 - PITT IN SWEDEN

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1695 - PITT IN AMSTERDAM

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1696 - PITT IN JAPAN YEAR PROGRAM

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1697 - STUDY ABROAD: CZECH REPUBLIC AND SPAIN

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1698 - STUDY ABROAD: THREE COUNTRIES

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1705 - PITT IN BRAZIL

Minimum Credits: 1
Maximum Credits: 1
Pitt in Brazil
Academic Career: UGRD
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1705IS - PITT IN BRAZIL - IS

Minimum Credits: 0
Maximum Credits: 0
Non-graded course for in-state tuition.
Academic Career: UGRD
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1705OS - PITT IN BRAZIL - OS

Minimum Credits: 0
Maximum Credits: 0
Non-graded course for in-state tuition.
Academic Career: UGRD
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1706IS - PITT IN CHINA AND INDIA - IS

Minimum Credits: 0
Maximum Credits: 0
Non-graded course for in-state tuition.
Academic Career: UGRD
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1709 - GLOBAL MENTAL HEALTH PROFESSIONS

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1710 - PITT IN SCOTLAND

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ARTSC 1710IS - PITT IN SCOTLAND - IS

Minimum Credits: 0
Maximum Credits: 0
Academic Career: UGRD
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1718 - PITT IN LOS ANGELES

Minimum Credits: 3
Maximum Credits: 15
This is a new Pitt in Program for Study Abroad.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Non-Graded Component

ARTSC 1746 - STUDY ABROAD: SLOVAKIA

Minimum Credits: 9
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Russian & East European Studies, West European Studies

ARTSC 1748 - STUDY ABROAD: MONGOLIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1763 - LONDON SCHOOL OF ECONOMICS

Minimum Credits: 3
Maximum Credits: 15
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Non-Graded Component

ARTSC 1763IS - LONDON SCHOOL OF ECONOMICS IN-STATE

Minimum Credits: 3
Maximum Credits: 15
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Non-Graded Component

ARTSC 1763OS - LONDON SCHOOL OF ECONOMICS OUT-OF-STATE

Minimum Credits: 3
Maximum Credits: 15
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Non-Graded Component

ARTSC 1764 - LONDON SCHOOL OF ECONOMICS ELECTIVE 1

Minimum Credits: 3
Maximum Credits: 3
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1765 - LONDON SCHOOL OF ECONOMICS ELECTIVE 2

Minimum Credits: 3
Maximum Credits: 3
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1766 - LONDON SCHOOL OF ECONOMICS ELECTIVE 3

Minimum Credits: 3
Maximum Credits: 3
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1767 - LONDON SCHOOL OF ECONOMICS ELECTIVE 4

Minimum Credits: 3
Maximum Credits: 3
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1768 - LONDON SCHOOL OF ECONOMICS ELECTIVE 5

Minimum Credits: 3
Maximum Credits: 3
This course is for students in an approved Study Abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1771 - PITT IN DUBLIN: TRINITY COLLEGE DUBLIN COURSE 1

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1772 - PITT IN DUBLIN: TRINITY COLLEGE DUBLIN COURSE 2

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1773 - PITT IN DUBLIN: TRINITY COLLEGE DUBLIN COURSE 3

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1774 - PITT IN DUBLIN: TRINITY COLLEGE DUBLIN COURSE 4

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1775 - PITT IN DUBLIN: TRINITY COLLEGE DUBLIN COURSE 5

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1778 - INTER-PROFESSIONAL STUDIES IRELAND SPRING BREAK

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1779 - INTERPROFESSIONAL STUDIES - NORTHERN IRELAND

Minimum Credits: 3
Maximum Credits: 15
This course is an part of a Study Abroad extension program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1780 - UNIVERSITY COLLEGE DUBLIN

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1781 - UNIVERSITY COLLEGE DUBLIN COURSE 1

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1782 - UNIVERSITY COLLEGE DUBLIN COURSE 2

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1783 - UNIVERSITY COLLEGE DUBLIN COURSE 3

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1784 - UNIVERSITY COLLEGE DUBLIN COURSE 4

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1785 - UNIVERSITY COLLEGE DUBLIN COURSE 5

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1786 - ABROAD SELECT

Minimum Credits: 1
Maximum Credits: 15
This course is for the Study Abroad program. Enrollment in this course must be approved through the Study Abroad Office.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1787 - PITT IN DUBLIN: TRINITY COLLEGE DUBLIN COURSE 6

Minimum Credits: 1
Maximum Credits: 3
This course is part of a Study Abroad program.

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1791 - PITTSBURGH-LONDON FILM PROGRAM COURSE 1

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1792 - PITTSBURGH-LONDON FILM PROGRAM COURSE 2

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1793 - PITTSBURGH-LONDON FILM PROGRAM COURSE 3

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1794 - PITTSBURGH-LONDON FILM PROGRAM COURSE 4

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1795 - PITTSBURGH-LONDON FILM PROGRAM COURSE 5

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1803 - PITTMAP: GLOBAL POLITICAL ECONOMY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1804 - EXCHANGE: CIDE, MEXICO

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1805 - EXCHANGE: INST SCIENCES PO, FRANCE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1806 - EXCHANGE: LINKOPING UNIVERSITY, SWEDEN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1807 - EXCHANGE: I.F.I., FRANCE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: West European Studies

ARTSC 1808 - EXCHANGE: NATIONAL TAIWAN UNIVERSITY, TAIWAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1809 - EXCHANGE: REMIN UNIVERSITY, CHINA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1810 - EXCHANGE: SOPHIA UNIVERSITY, JAPAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1811 - EXCHANGE: CHINESE UNIVERSITY OF HONG KONG

Minimum Credits: 1
Maximum Credits: 15

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1812 - EXCHANGE: UNIVERISTY OF HONG KONG

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1813 - EXCHANGE: UNIVERSITE LIBRE DE BRUXELLES, BELGIUM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1814 - EXCHANGE: UNIVERSITY OF CANTABRIA, SPAIN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1816 - EXCHANGE: LEIDEN UNIVERSITY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1817 - EXCHANGE: UNIVERSITY OF KITAKYUSHU, JAPAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1818 - EXCHANGE: KOBE UNIVERSITY JAPAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ARTSC 1819 - EXCHANGE: UNIVERSITY OF ADELAIDE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate

Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1820 - EXCHANGE: RITSUMEIKAN, JAPAN

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1821 - EXCHANGE: YONSEI UNIVERSITY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1822 - EXCHANGE: SEOUL NATIONAL UNIVERSITY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1823 - EXCHANGE: KOREA UNIVERSITY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1824 - EXCHANGE: MACQUARIE UNIVERSITY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1825 - EXCHANGE: TEC DE MONTERREY, MEXICO

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1826 - EXCHANGE: KOC UNIVERSITY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1827 - INTERNATIONAL EXCHANGE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1834 - EXCHANGE: UNIVERSITIES OF APPLIED SCIENCE, GERMANY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1835 - EXCHANGE: UNIVERSITY OF SHEFFIELD, UNITED KINGDOM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: West European Studies

ARTSC 1838 - EXCHANGE: UNIVERSITY OF SUSSEX, UNITED KINGDOM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1841 - EXCHANGE: UNIVERSITY OF WALES, ABERYSWYTH, UNITED KINGDOM

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1842 - EXCHANGE: UNIVERSITY OF BIRMINGHAM, UNITED KINGDOM

Minimum Credits: 6
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1845 - EXCHANGE: UNIVERSITY DE MONTEVIDEO, URUGUAY

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1846 - EXCHANGE: NATIONAL UNIVERSITY OF SINGAPORE

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1850IS - CAMBRIDGE SCHOLARS- IS

Minimum Credits: 0
Maximum Credits: 0
Non-graded course for in-state tuition.
Academic Career: UGRD
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1850OS - CAMBRIDGE SCHOLARS-OS

Minimum Credits: 0
Maximum Credits: 0
Non-graded course for out-of-state tuition.
Academic Career: UGRD
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Pitt Class

ARTSC 1851 - CAMBRIDGE COURSE 1

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1852 - CAMBRIDGE COURSE 2

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1853 - CAMBRIDGE COURSE 3

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1854 - CAMBRIDGE COURSE 4

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1855 - CAMBRIDGE COURSE 5

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1856 - CAMBRIDGE COURSE 6

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ARTSC 1861 - UNIVERSITY COLLEGE LONDON COURSE 1

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1862 - UNIVERSITY COLLEGE LONDON COURSE 2

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1863 - UNIVERSITY COLLEGE LONDON COURSE 3

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1864 - UNIVERSITY COLLEGE LONDON COURSE 4

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1865 - UNIVERSITY COLLEGE LONDON COURSE 5

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ARTSC 1871 - PITT IN THE PACIFIC ELECTIVE 1

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1872 - PITT IN THE PACIFIC ELECTIVE 2

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1873 - PITT IN THE PACIFIC ELECTIVE 3

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1874 - PITT IN THE PACIFIC ELECTIVE 4

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1875 - PITT IN THE PACIFIC ELECTIVE 5

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ARTSC 1899 - INTERNSHIP ABROAD

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

ARTSC 1900 - ARTSC ACADEMIC INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
An academic internship offers students a unique learning opportunity to connect classroom knowledge with real-world settings as they explore careers and gain valuable experience. Students may earn from 1-3 credits for an experience that can be related to an academic field of study. The experience must be pre-professional in nature and must be approved by the Dietrich School Office of Undergraduate Research. Students must seek out and apply for their own internship. Internship can be found through Career Development and Placement Assistance, or students can contact the Office of Undergraduate Research. Students who are earning credit for ARTSC 1900 internships may not receive pay. Students must work at least 120 hours over the course of the term to be eligible for the maximum of 3 credits. In order to earn credit, the student must have a Dietrich School

faculty sponsor (full-time only) who will assign related academic work. Internships are graded as S/NC.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

ARTSC 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Independent study entails an independent program of study, research, or creative activity with some guidance from a sponsoring faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ARTSC 1902 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ARTSC 1903 - INTERNSHIP IN LONDON

Minimum Credits: 3
Maximum Credits: 6
An internship is a special type of independent study in which the student works in a non-academic setting. The internship should be directly related to an academic discipline, and the student's learning is evaluated and graded by a faculty member. Internships under this course listing are conducted in London, England, as part of Pitt's London study abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ARTSC 1910 - INSTITUTE OF POLITICS INTERNSHIP

Minimum Credits: 2
Maximum Credits: 2
This course represents the experiential component of the politics institute's undergraduate internship. The purpose of the internship experience is to provide the student with direct exposure to the process of public decision-making. Each student will work with an individual or office directly involved in the policy-making process. Students will be selected through a competitive process.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Attributes: Urban Studies

ARTSC 1917 - INDEPENDENT STUDY ABROAD

Minimum Credits: 1
Maximum Credits: 12
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Study Abroad

ARTSC 1918 - INTERNSHIP IN CHINA

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Internship
Grade Component: Satisfactory/No Credit

ARTSC 1930 - STUDY ABROAD: ESTONIA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Russian & East European Studies, West European Studies

ARTSC 1950 - PEER TUTORING EXPERIENCE

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

Athletic Training

ATHLTR 1811 - BASIC ATHLETIC TRAINING

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide the student with an introduction to the athletic training profession. Topics to include medical terminology, mechanisms of injury, and recognition and treatment of common athletic injuries to major body parts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ATHLTR 1812 - BASIC ATHLETIC TRAINING LAB

Minimum Credits: 1
Maximum Credits: 1
An introduction to basic taping techniques and injury evaluation techniques used in the profession of athletic training. Basic supportive strappings and paddings for immediate care and competition are presented as well as basic joint evaluation procedures, assessment of vital signs, and crutch fitting.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: CREQ: ATHLTR 1811

ATHLTR 1821 - INJURY EVALUATION AND TREATMENT 1

Minimum Credits: 3
Maximum Credits: 3
The course includes anatomy, recognition, and commonly accepted techniques and procedures for clinical evaluation of common athletic injuries to the foot, ankle, leg, thigh, hip, pelvis and lumbar spine.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS. BS-H, BPH)

ATHLTR 1822 - INJURY EVALUATION AND TREATMENT 2

Minimum Credits: 3
Maximum Credits: 3
The course includes anatomy, recognition, and commonly accepted techniques and procedures for clinical evaluation of common athletic injuries to

the shoulder, arm, elbow, fore arm, wrist, hand, head, face, cervical and thoracic spine, and internal organs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1823 - ADMINISTRATIVE ASPECTS OF ATHLETIC TRAINING

Minimum Credits: 2
Maximum Credits: 2
This course presents current administrative issues in athletic training including training room facility and design, record keeping procedures, personnel management and recruitment, medico-legal considerations and budgetary principles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1824 - ATHLETIC TRAINING PRACTICUM 1

Minimum Credits: 3
Maximum Credits: 3
Designed to supplement first clinical experience presented in seminar fashion to address clinical proficiencies published in the 3rd edition of the NATA athletic training educational competencies introduced in the second semester academic courses. Presented by faculty of the AT program then evaluated in clinical setting in live situations when possible or under simulated conditions when narrated. Specific emphasis placed on those proficiencies that can be grouped into modules and which do not receive broad coverage in an academic course.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1831 - THERAPEUTIC MODALITIES AND LAB

Minimum Credits: 4
Maximum Credits: 4
The course presents the theoretical basis for use of superficial heat and cold, ultrasound, electrical muscle stimulation, tens, and other current modalities. Laboratory experiences are included in the use of these modalities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1832 - THERAPEUTIC EXERCISE AND LAB

Minimum Credits: 4
Maximum Credits: 4
The course includes basic components of a comprehensive re habilitation program and theory and principles associated with the use of special evaluation/therapeutic exercise techniques. Laboratory experiences include practical use of manual testing techniques, goniometry, and the application of selected types of manual exercises.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1833 - STRENGTH AND CONDITIONING

Minimum Credits: 2
Maximum Credits: 2
Instruction is provided describing the physiological basis for development of pre-season, in-season and off-season strength and conditioning programs. Laboratory experiences will include the theory and technique of operating contemporary isotonic, isokinetic and isometric strength training equipment.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1834 - SPECIAL TOPICS IN ATHLETIC TRAINING

Minimum Credits: 2
Maximum Credits: 2
The course includes common orthopedic problems encountered by the athletic trainer and orthopedic surgeon. Students are exposed to commonly used techniques of primary and re constructive surgery through lecture, operating room, clinic, and orthopedic rounds experiences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1835 - ATHLETIC TRAINING PRACTICUM 2

Minimum Credits: 3
Maximum Credits: 3
Designed to supplement second clinical experience presented in seminar fashion to address clinical proficiencies published in the 3rd edition of the NATA athletic training educational competencies introduced in the second semester academic courses. Presented by faculty of the AT program then evaluated in clinical setting in live situations when possible or under simulated conditions when narrated. Specific emphasis placed on those proficiencies that can be grouped into modules and which do not receive broad coverage in an academic course.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1841 - ATHLETIC TRAINING PRACTICUM 3

Minimum Credits: 3
Maximum Credits: 3
Designed to supplement third clinical experience presented in seminar fashion to address clinical proficiencies published in the 3rd edition of the NATA athletic training educational competencies introduced in the second semester academic courses. Presented by faculty of the AT program then evaluated in clinical setting in live situations when possible or under simulated conditions when narrated. Specific emphasis placed on those proficiencies that can be grouped into modules and which do not receive broad coverage in an academic course.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1842 - ATHLETIC TRAINING PRACTICUM 4

Minimum Credits: 3
Maximum Credits: 3
Designed to supplement fourth clinical experience presented in seminar fashion to address clinical proficiencies published in the 3rd edition of the NATA athletic training educational competencies introduced in the second semester academic courses. Presented by faculty of the AT program then evaluated in clinical setting in live situations when possible or under simulated conditions when narrated. Specific emphasis placed on these proficiencies that can be grouped into modules and which do not receive broad coverage in an academic course.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)
Course Attributes: Capstone Course

ATHLTR 1843 - ADVANCED ORTHOPEDIC ASSESSMENT

Minimum Credits: 2
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training(BS, BPH, or BS-H)

ATHLTR 1866 - PSYCHOLOGY OF SPORT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS, BS-H, BPH)

ATHLTR 1885 - INTRODUCTION TO EVIDENCE BASED REHABILITATION

Minimum Credits: 3
Maximum Credits: 3
Provides basic skills in reading, reviewing, and critiquing the research literature in the rehab sciences. These skills will be applied to the relevant literature in diagnosis, prognosis and intervention strategies within the spectrum of rehab science. Students learn to generate relevant research questions, utilize an evidenced based medicine approach, appraisal and synthesis of current articles within the fore mentioned areas. Will culminate in an individual review project aimed at the development and resolution of one research question, using the best, current available literature
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Athletic Training (BS)

ATHLTR 1899 - INDEPENDENT STUDY FOR ATHLETIC TRAINING STUDENTS

Minimum Credits: 1
Maximum Credits: 3
Provides advanced athletic training students an opportunity to explore in depth an area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial. An individual contract will be required for each student that outlines objectives and means of achieving stated objectives in order to ear a passing grade. ATHLTR 1899 Independent study can only be taken on a Pass/Fail basis
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Requirements: School of Health and Rehabilitation Sciences students only.

Bioengineering

BIOENG 0050 - WORKSHOP IN BIOENGINEERING DESIGN

Minimum Credits: 1
Maximum Credits: 1
Students are introduced to Bioengineering design use of the SolidWorks software suite. SolidWorks is one of several computer aided engineering software packages (AutoCAD and ProEngineer are other examples) that is widely used in industry and academia. Skills learned (1) will help with Bioengineering design projects, and (2) are easily translated to other computer engineering packages such as AutoCAD or ProEngineer. The workshop consists of weekly SolidWorks-based practice assignments (tutorials) that must be completed to receive a grade in the course
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Requirements: PLAN: Bioengineering

BIOENG 0051 - WORKSHOP IN MEDICAL DEVICES- THE BASICS

Minimum Credits: 1
Maximum Credits: 1
"Reverse engineering" of medical devices is used to introduce students to basic terminology in the medical device field, the coupling of design with function, and the processes involved in moving from device conception to product. The course (1) emphasizes the significance of curiosity and information seeking in device development, (2) will help with Bioengineering design projects, and (3) will expand knowledge of devices in general, along with needs assessment. Mulitple medical specialties will be covered, along with basic function of devices (diagnostics, treatment, monitoring, etc). The workshop will use "hands on" learning experiences, focusing on devices that can be taken apart. After discussion of device purpose and function, students will be challenged to identify potential design improvements. Students are expected to be active participants in the seminar. Course Objectives: Upon completing the course, the student should be conversant with medical device terminology, be able to state the basic elements involved in needs assessment, and be able to identify hurdles in medical device development.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Bioengineering

BIOENG 0052 - WORKSHOP IN OPENSIM

Minimum Credits: 1
Maximum Credits: 1
Computational models and simulations are tremendously useful tools for understanding human movement control. It is not always straightforward to identify cause-and-effect relationships through experiments alone and computational modeling and simulation techniques can complement experimental approaches - e.g., models can provide estimates of important variables such as muscle forces that are difficult to measure experimentally. OpenSim is an open-source software package that enables users to build, exchange, and analyze computer models of the musculoskeletal system and dynamic simulations of movement (Delp et al., 2007). The purpose of this course is to introduce students to OpenSim by demonstrating the utility of graphics-based modeling and simulation. Specifically, students will learn how to use OpenSim tools, through both the graphical user interface (GUI) and Application Programming Interface (API) that uses Matlab scripting, to analyze and simulate models and motions. Course Objectives: Upon completing the course, the student should be able to use OpenSim to analyze and develop forward dynamic simulations of movement. The course consists of weekly practice assignments that must be completed to receive a satisfactory (S) grade.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PLAN: Bioengineering

BIOENG 0053 - WORKSHOP IN STATISTICAL DESIGN

Minimum Credits: 1
Maximum Credits: 1
Engineers use experiments for a variety of reasons, some of which are: determine whether one treatment is better than an alternative; determine parameters in a descriptive model; and determine accurate physical properties of a material. Simply put, experiments take time and can be expensive. Statistical design of experiments (DOE) is a tool to maximize the amount of relevant information gained while minimizing the amount of experimentation required to obtain that information. After discussion of general experimental design principles, Design-Ease® software is used to introduce students to DOE through a series of workshops that highlight the importance of DOE in engineering practice. The course consists of weekly practice assignments that must be completed to receive a satisfactory (S) grade. Course Objectives: Upon completing the course, the student should be able to design an experiment using statistical design of experiment principles to maximize knowledge gained from the experiment.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: ENGR 0020 or BIOENG 1000; PLAN: Bioengineering

BIOENG 0054 - WORKSHOP IN DESIGN FOR MANUFACTURABILITY

Minimum Credits: 1
Maximum Credits: 1
Design for Manufacturability (DFM) provides a systematic methodology that can be used to analyze product design for improvements in assembly and manufacturing. Students will use DFM to redesign current products for changes in manufacture that lead to reduction in production cost and improved operability/customer satisfaction. Students will employ modern software tools that accurately model parts for specific manufacturing operations, model part costs, simplify products, find specific avenues to reduce manufacturing and assembly costs, benchmark products, and quantify improvements. Course Objectives : Students will gain hands-on experience incorporating the DFM concepts in a project. Upon completing the course, the students should be able to describe the utility of DFM in product development and early manufacturing design, be able to quantitatively evaluate the impact of design choices on manufacturing cost, and be able to use modern quality control concepts and approaches.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: (BIOENG 0050 and BIOENG 1024) or MEMS 0024; PLAN: Bioengineering

BIOENG 1000 - STATISTICS FOR BIOENGINEERING

Minimum Credits: 4
Maximum Credits: 4
Bioengineering statistics will present the basic statistical methods that are relevant to engineering and clinical applications. Specifically, students will learn to consider the assumptions inherent to statistical analyses; calculate statistical parameters; automate statistical methods using software; interpret the meaning of statistical parameters; and design experiments conducive to proper statistics. Biological and medical examples will be used to reinforce concepts of the course.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0230 or 0235, PLAN: Bioengineering

BIOENG 1002 - INTRAMURAL INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
Students employ practical experience, gained from mentored research in an academic environment, which includes project planning, design of experiments, and analysis of results to develop professional quality oral presentation skills. Emphasis is placed on critical analysis of research projects, development of technical abstract writing skills, and development of professional quality visual aids that accompany oral presentations. The course culminates with an oral presentation at a technical symposium. Upon completing the course, the student should be able to prepare a professional quality abstract documenting background, methodology, and results from a research project and make a professional quality oral presentation describing the research.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0020 or BIOENG 1000; PLAN: Bioengineering

BIOENG 1005 - RADIOFREQUENCY MEDICAL DEVICES

Minimum Credits: 3
Maximum Credits: 3
The course will cover topics related to the applications of electromagnetics and RF in medicine and in other devices that can cause thermal safety hazards. Topics such as Maxwell Equations, Wave Equations, Transmission Lines, Electromagnetic Theorems, Introduction to Antennas, and Introduction to Computational Electromagnetics will be presented. The class will include analyses of several RF devices used in medical applications and/or have electromagnetic safety implications such as magnetic resonance imaging (MRI), biological sensors (brain machine interface), RF ablation, and cell phones. Upon completing the course, the student should be able to describe how to apply fundamental electromagnetic principles to set up and solve problems in RF devices used in medical applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1310; CREQ: BIOENG 1320; PLAN: Bioengineering

BIOENG 1024 - MEDICAL PRODUCT DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course has been designed to provide you an opportunity to learn the fundamentals of medical product design. The overarching goal of this course is to focus on the basics to support the medical product design process including ethnography, FDA Design Controls, sketching, prototyping, and material and adhesive specification.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0011 or ENGR 0015 or ENGR 0711 or ET 0011; PLAN: Bioengineering

BIOENG 1050 - ARTIFICIAL ORGANS

Minimum Credits: 3
Maximum Credits: 3
Artificial organs is the first of a three course sequence that explores design, development, and clinical use of artificial organ technology. Each course in the series is stand-alone and, as such, is not a prerequisite for any other course in the series. Students may take one, two, or all three courses. Artificial organs is directed toward artificial heart and vascular prostheses. The basic physiology of each system (heart and vascular) is reviewed with emphasis on identifying the bioengineering design requirements for appropriate organ replacement systems. Commercially available systems are analyzed from the point of view (where applicable) of mass transfer efficiency; biomechanics and hemodynamic similarity to the host; and size and efficiency of the device. Students will be required to design an artificial organ consistent with the above-mentioned considerations. Upon completing the course, the student should be able to describe the fundamental engineering principles related to heart and vascular physiology and apply the fundamental principles to design improvements and/or new designs for artificial heart and vascular prostheses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1220; PLAN: Bioengineering

BIOENG 1051 - ARTIFICIAL ORGANS 2

Minimum Credits: 3
Maximum Credits: 3
Artificial organs 2 is the second of a three course sequence that explores design, development, and clinical use of artificial organ technology. Each course in the series is stand-alone and, as such, is not a prerequisite for any other course in the series. Students may take one, two, or all three courses. Artificial organs 2 is focused on artificial blood and artificial lung. The basic physiology of each system (blood and the lungs) is reviewed with emphasis on identifying the bioengineering design requirements for appropriate organ replacement systems. Commercially available systems are analyzed from the point of view (where applicable) of mass transfer efficiency; biomechanics and hemodynamic similarity to the host; and size and efficiency of the device. Students will be required to design an artificial organ consistent with the above-mentioned considerations. Upon completing the course, the student should be able to describe the fundamental engineering principles related to blood and lung physiology and apply the fundamental principles to design improvements and/or new designs for artificial blood substitutes and artificial lung devices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1220; PLAN: Bioengineering

BIOENG 1052 - ARTIFICIAL ORGANS 3

Minimum Credits: 3
Maximum Credits: 3
Artificial organs 3 is the third of a three course sequence that explores design, development, and clinical use of artificial organ technology. Each course in the series is stand-alone and, as such, is not a prerequisite for any other course in the series. Students may take one, two, or all three courses. Artificial organs 3 is focused upon artificial kidney and artificial liver. The basic physiology of each system (kidney and liver) is reviewed with emphasis on identifying the bioengineering design requirements for appropriate organ replacement systems. Commercially available systems are analyzed from the point of view (where applicable) of mass transfer efficiency; biomechanic and hemodynamic similarity to the host; and size and efficiency of the device. Students will be required to design an artificial organ consistent with the above-mentioned considerations. Upon completing the course, the student should be able to describe the fundamental engineering principles related to kidney and liver physiology and apply the fundamental principles to design improvements and/or new designs for artificial kidney and artificial liver.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1220; PLAN: Bioengineering

BIOENG 1070 - INTRODUCTORY CELL BIOLOGY 1

Minimum Credits: 3
Maximum Credits: 3
Principles of cell biology in higher organisms: structure, function, biosynthesis, and macromolecular organization with a focus on macromolecular organization and function from a quantitative systems perspective. Upon completing the two course sequence, BIOENG 1070 and BIOENG 1071, students should be able to (1) demonstrate understanding of the principles of cell structure and function, (2) describe the experimental tools used to understand cellular function such as molecular genetic techniques, biochemical analysis, and microscopy, and (3) use systems approaches to understand how cellular processes are integrated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: (PREQ: ENGR 0012 and CHEM 0120 and PHYS 0175) (CREQ: ENGR 0016); PLAN: Bionengineering
Course Attributes: Hourly Final

BIOENG 1071 - INTRODUCTION TO CELL BIOLOGY 2

Minimum Credits: 3
Maximum Credits: 3
Continuation of BIOENG 1071. Principles of cell biology in higher organisms: structure, function, biosynthesis, and macromolecular organization with a focus on macromolecular organization and function from a quantitative systems perspective. Upon completing the two course sequence, BIOENG 1070 and BIOENG 1071, students should be able to (1) demonstrate understanding of the principles of cell structure and function, (2) describe the experimental tools used to understand cellular function such as molecular genetic techniques, biochemical analysis, and microscopy, and (3) use systems approaches to understand how cellular processes are integrated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1070; PROG: Swanson School of Engineering

BIOENG 1072 - HONORS INTRODUCTORY CELL BIOLOGY 2

Minimum Credits: 3
Maximum Credits: 3
Principles of cell biology in higher organisms: structure, function, biosynthesis, and macromolecular organization with a focus on macromolecular organization and function from a quantitative systems perspective. This course is accompanied by a weekly one hour seminar in which original research articles pertinent to cell biology are presented and discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1070; PROG: Swanson School of Engineering
Course Attributes: University Honors Course

BIOENG 1075 - INTRODUCTION TO CELL AND MOLECULAR BIOLOGY LABORATORY TECHNIQUES

Minimum Credits: 3
Maximum Credits: 3
An undergraduate laboratory course designed to complement theoretical knowledge learned in BIOENG 1070 & 1071 that covers practical aspects of fundamental cell biology, cell culture, visualization of cellular components, protein biochemistry (isolation, purification, and analysis), molecularupon completing the course, the student should have acquired 'hands-on' skills in basic techniques in cell biology, biochemistry and molecular biology and be able to apply them in practice. Biology techniques, and functional measurements in cells.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1070; PLAN: Bioengineering

BIOENG 1085 - INTRO TO BIOENGINEERING: SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Seminar is designed to acquaint students with aspects of bioengineering that are not normally encountered in the classroom or extracurricular activity settings. As such, seminar is a vehicle to provide important information and communicate materials that students need to know to maximize their educational experience and develop post-graduation plans. Emphasis is placed on career planning and development and options available in the undergraduate program that will help realize post-graduation goals. Student awareness of opportunities that are available and knowledge about how to utilize the opportunities for their benefit.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PLAN: Bioengineering

BIOENG 1086 - BIOENGINEERING SEM FOR MINORS

Minimum Credits: 0
Maximum Credits: 0
One hour lecture format by members of the bioengineering community of both the university of Pittsburgh and other institutions.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

BIOENG 1095 - SPECIAL PROJECTS

Minimum Credits: 1
Maximum Credits: 6
: Special Projects provides an opportunity for students to develop an individual research project under the guidance of a faculty member/mentor. Projects can involve laboratory research, engineering design, or instructional development. While the project must be related to bioengineering, the mentor can be a faculty member in any department or hospital affiliated with the University of Pittsburgh. A written report documenting the project and project outcomes is required. Typical report format (abstract, introduction, methods, results, discussion, and references) is expected. The length of the report should reflect the number of credits received The report must be submitted to both the Undergraduate Coordinator, Department of Bioengineering, and the mentor. The mentor will evaluate the quality of the project and report and submit a letter grade recommendation to the Undergraduate Coordinator.
Academic Career: Undergraduate

Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

BIOENG 1096 - UNDERGRADUATE TEACHING EXPERIENCE

Minimum Credits: 1
Maximum Credits: 2
Undergraduate Teaching Experience provides students an opportunity to volunteer as an Undergraduate Teaching Assistant (TA) or Grader. Undergraduates can participate in helping develop and deliver lecture content, managing recitations or laboratories, developing and/or grading quizzes, evaluating homeworks, and general review of course materials.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit
Course Requirements: PROG: Swanson School of Engineering

BIOENG 1150 - BIOENG METHODS AND APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
Bioengineering methods and applications uses laboratory experiences to illustrate principles taught in several bioengineering core classes. In addition to being exposed to particular laboratory skills for each of the experimental modules in the course, students are expected to practice previously developed skills in technical writing, creating tables and graphs, data analysis, and statistics to create professional quality laboratory reports that document each module. Upon completing the course, the student should be able to state and describe the basic components of a laboratory report and create well-written archival documents that reflect professional quality work.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ:(BIOENG 1071 or BIOENG 1072) and BIOENG 1220 and BIOENG 1310 and BIOENG 1630; Plan: Bioengineering

BIOENG 1160 - BIOENGINEERING DESIGN 1

Minimum Credits: 3
Maximum Credits: 3
The two course sequence, bioengineering design 1 & 2, is a mentored opportunity for the student to synthesize and extend skills and knowledge acquired during the undergraduate education experience in design (or redesign) of a biomedical product or equivalent. Students are exposed to key facets of the medical product design process and the unique regulatory requirements for biomedical products. Student teams select a design project, conduct a market/reimbursement analysis, apply design process methodology, maintain a design history file, and create a prototype product. Students will be able to apply appropriate product design-related procedures and tools, maintain design history files, conduct preliminary market/reimbursement studies, and address regulatory affairs in developing a prototype biomedical product or equivalent.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LEVEL: Senior; PLAN: Bioengineering
Course Attributes: Capstone Course

BIOENG 1161 - BIOENGINEERING DESIGN 2

Minimum Credits: 3
Maximum Credits: 3
The two course sequence, bioengineering design 1 & 2, is a mentored opportunity for the student to synthesize and extend skills and knowledge acquired during the undergraduate education experience in design (or redesign) of a biomedical product or equivalent. Students are exposed to key facets of the medical product design process and the unique regulatory requirements for biomedical products. Student teams select a design project, conduct a market/reimbursement analysis, apply design process methodology, maintain a design history file, and create a prototype product. Students will be able to apply appropriate product design-related procedures and tools, maintain design history files, conduct preliminary market/reimbursement studies, and address regulatory affairs in developing a prototype biomedical product or equivalent.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1160 ; PLAN: Bioengineering (BSE or BEH)
Course Attributes: Capstone Course

BIOENG 1210 - BIOENGINEERING THERMODYNAMICS

Minimum Credits: 3
Maximum Credits: 3
Bio thermodynamics uses an interactive framework in the joint (student and instructor) exploration of thermodynamics as it applies on the biological cellular and systems level. At this most fundamental level, thermodynamics studies the flow of energy, interconversion of energy, maintenance of cellular function and information, and the processes necessary to sustain life itself. Upon completing the course, the student should be able to describe how the three laws of thermodynamics and entropy impact biological systems, and be able to apply fundamental thermodynamics principles to set up and solve problems in physiological systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0290 and (PHYS 0175 or PHYS 0476) and (CHEM 0960 or CHEM 0120 or CHEM 0720); PLAN: Bioengineering

BIOENG 1211 - HONORS BIOENGINEERING THERMODYNAMICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0290 and (PHYS 0175 or PHYS 0476) and (CHEM 0960 or CHEM 0120 or CHEM 0720); PLAN: Bioengineering

BIOENG 1218 - EMERGING BIOMEDICAL TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3
Emerging Biomedical Technologies is offered by Rehabilitation Science and cross-listed with Bioengineering. The purpose of this course is to provide the students with an understanding of stem cell biology, tissue engineering, and related applications involved in rehabilitation sciences and regenerative medicine. The course material is designed to aid students considering a future as researchers in biomedical sciences laboratories or biotechnology research and development. It will provide digests of the latest research technologies and clinical applications in these fields. Students will be encouraged to synthesize concepts aimed to test solutions and therapies to improve human health by use of modern biomedical technologies. The lecture and discussion format gives students a broad background and the opportunity to apply critical thinking skills to recent published findings. Students who satisfactorily complete the course should be able to: Describe the emergent life science technologies covered in the course, Describe the biology of stem cells, their unique characteristics, and uses as therapies for disease and injury, Describe different approaches used in gene and cell therapeutic strategies, Describe the complexity of ethical and legal issues involved in this line of biomedical research, Describe the process of moving research into the translational phase with sufficient knowledge of the processes of FDA approval of therapies, Demonstrate an ability to effectively search for, analyze and critique current scientific publications on stem cell biology, cell and gene therapy and tissue engineering, Synthesize concepts aimed to test solutions and therapies to improve human health by use of modern biotechnologies discussed in class
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Bioengineering; PREQ: BIOENG 1210

BIOENG 1220 - BIOTRANSPORT PHENOMENA

Minimum Credits: 3
Maximum Credits: 3
Biotransport Phenomena follows logically from BioThermodynamics (BIOENG 1210). While thermodynamics looks at systems in equilibrium, transport phenomena looks at systems disrupted from equilibrium. The fundamental principles of momentum, heat, and mass transfer are developed and illustrated through applications to practical and classical paradigms of transport in biological, physiological, and biomedical processes. Students are introduced to the use of conservation balances to describe microscopic and macroscopic properties of a system. Course Objectives: Upon completing the course, the student should be able to describe the fundamental principles pertaining to momentum, heat, and mass transport and apply the fundamental principles to set up and solve problems in physiological systems and design of medical devices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0240 and (BIOENG 1210 or BIOENG 1211); PLAN: Bioengineering

BIOENG 1241 - SOCIETAL, POLITICAL AND ETHICAL ISSUES IN BIOENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Engineering, as a profession, has ethical obligations to society that go beyond the simple application of technology as learned in science and technology courses. Bioethics seeks to supplement technological aspects of bioengineering by engaging students in an analysis of the effects of bioengineering developments on society, focusing on safety of the public as a primary ethical concern. Students are educated on a variety of ethical tools that enable them to analyze fictional, yet realistic, cases. Students are evaluated individually, as well as in groups, with a particular focus on the ethical issues related to their senior design projects (BIOENG 1160 & 1161). Upon completion of the course, students will be able to recognize, articulate, and resolve ethical issues within the arena of bioengineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BIOENG 1160; PLAN: Bioengineering; LEVEL: Juniors

BIOENG 1255 - DYNAMIC SYSTEMS: PHYSIOLOGICAL PERSPECTIVE

Minimum Credits: 4
Maximum Credits: 4
A foundation of basic systems concepts is built through combining modeling of dynamic systems with physiological examples. Mathematical models of physiological systems are developed using a combination of systems understanding (analogous thinking, engineering synthesis and analysis, and integrative system approaches in solving problems) and bioengineering design (recognizing the potential applications of both engineering principles to biology and biological principles to engineering). These models are then used to address biological/clinical questions. Upon completing the course, the student should be able to: demonstrate skill and competence in methods of dynamic systems modeling through (a) building dynamic models of bioelectrical, biomechanical, biochemical, and physiological systems, (b) solving systems of equations representing dynamic models including analytical, numerical, and graphical software methods, (c) validating models including descriptive, predictive, and explanative validation, and (d) applying models to scientific and engineering applications including analysis and synthesis relative to identification and simulation. Describe physiological processes in dynamic system terms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1320 and (BIOSC 1250 or NROSCI 1250 or BIOSC 1070 or NROSCI 1070 or NUR 0012); PLAN: Bioengineering

BIOENG 1310 - LINEAR SYSTEMS AND ELECTRONICS 1

Minimum Credits: 3
Maximum Credits: 3
Bioinstrumentation covers electronic circuit theory and the practical aspects of building electronic prototypes. The mathematics of complex exponentials and complex impedance are also covered. A series of projects are built by each student individually, using a system of student-owned electronics components and tools called the pittkit. The kit includes a special apparatus, the breadboard laboratory interface processor (blip) which each student constructs, and which acts as a logging voltmeter, a frequency meter, a logic analyzer, a waveform generator, and a pulse duration meter. The blip interfaces to any computer via a USB port, without requiring any special software to be installed on the computer. After completing the course, the student should be able to design and construct prototypes of useful, simple circuits, such as preamplifiers and signal conditioners for sensors, as well as use off-the-shelf modules to construct laboratory instrumentation. They should be able to describe applications to other linear systems such as those found in physiological systems with greater clarity from having worked with circuits.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0240 and (PHYS 0175 or PHYS 0476); PLAN: Bioengineering

BIOENG 1320 - BIOLOGICAL SIGNALS AND SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
The theory and application of linear time-invariant (LTI) systems is explored, with emphasis on an appreciation of the description and analysis of biomedical signals and systems via LTI methods. After completing the course, the student should be able to state the properties of LTI systems; be able to test whether a system is LTI; know how to obtain, and interpret, the frequency response, impulse response, step response, and transfer function of a system. The student should also be able to demonstrate mastery of the mathematical skills of convolution and integral transform techniques
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1310 and MATH 0240 and MATH 0290; PLAN: Bioengineering
Course Attributes: Hourly Final

BIOENG 1330 - BIOMEDICAL IMAGING

Minimum Credits: 3
Maximum Credits: 3
Biomedical imaging introduces the major imaging modalities (x-ray, cat-scan, MRI, ultrasound) used in clinical medicine and biomedical research, as well as the fundamentals of images, from a signals and systems standpoint. After completing the course, the student should be able to use imaging modalities to determine anatomical or physiological function and apply physics and signal processing in medical imaging for particular research applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1320; PLAN: Bioengineering

BIOENG 1340 - INTRODUCTION TO MEDICAL IMAGING AND IMAGE ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Introduction to Medical Imaging and Image Analysis presents the physics of image formation as well as methods for tomographic image reconstruction for major medical imaging modalities, including X-ray Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). Also introduced are fundamentals of digital image processing, with particular emphasis on medical applications, including basic techniques to enhance image quality, image de-noising, methods for extracting, classifying, and tracking features of and objects in images, etc. Students will learn how to implement these techniques in MATLAB (The MathWorks Inc., Natick, MA) to solve practical image processing problems. MATLAB exercises will demonstrate to students how filtering operations applied in the image domain or the Fourier domain affect medical images. In addition to these fundamentals, more advanced algorithmic approaches for image segmentation and image as well as point-cloud registration techniques will also be reviewed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1320 and MATH 0240 and MATH 0290; PLAN: Bioengineering

BIOENG 1351 - COMPUTER APPLICATIONS IN BIOENGINEERING

Minimum Credits: 3
Maximum Credits: 3
LabVIEW programming is taught in the context of real-world tasks that engineering students will likely encounter in future academic or industrial work. Practical applications of signal processing tools and software design specification development are especially relevant. The fundamentals of LabVIEW, data flow programming concepts, programming with graphical user interfaces, modular programming structures, and data acquisition and control concepts are covered. Course Objectives: Upon completing the course, students should be able to successfully implement a solution to basic engineering programming tasks using LabVIEW. Students should be able to identify and utilize open source and commercial software libraries to tackle more advanced design problems without coding from scratch. Students should be able to effectively use LabVIEW to solve real-world engineering computing problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CS 0441 or (ENGR 0012 or ENGR 0712 or ENGR 0716); PLAN: Bioengineering

BIOENG 1355 - MEDICAL PRODUCT REGULATION AND REIMBURSEMENT

Minimum Credits: 3
Maximum Credits: 3
This course has been created as an introduction to the medical product development requirements of teh Food and Drug Agency (FDA). Also included is an overview of medical product reimbursement of the Centers for Medicare and Medicaid Services (CMS). The educational objectives for this course include: 1. How the history of the FDA affects the Agency's perspective and regulatory activities; 2. An introduction to quality systems with a focus on FDA's Quality System Regulation (QSR); 3. An overview of the key elements of teh Design Controls subsection of the FDA QSR; 4. How the regulatory requirements in Europe contrast with those of the FDA; 5. How FDA regulatory requirements differ from reimbursement policies of the CMS A series of case studies will be used to reinforce key lecture topics and prepare you to utilize this knowledge in the future whether that be clinical medicine, research, or industry. A secondary goal of this course is to prepare you to implement some of these practices during Senior Design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Bioengineering

BIOENG 1370 - COMPUTATIONAL SIMULATION IN MEDICAL DEVICE DESIGN

Minimum Credits: 3
Maximum Credits: 3
Computational simulation is increasingly utilized as a method to assess the performance of medical devices. The course provides students with a hands on learning experience on how to use computational simulation in the modeling and design of medical devices. The course details the important steps in computational simulations from preprocessing to solution to post-processing and data presentation. Commercially available software programs are introduced and used to simulate a variety of physical phenomena (solid, fluid, transport) pertinent to medical device design. Upon completing the course, the student should be able to simulate the solid, fluid, and transport phenomena that are useful in medical device design. Particular attention will be placed on avoiding common mistakes in the preprocessing and interpretation of computational results. Topics covered: geometry creation; discretization; appropriate assignment of material properties; solver management; error mitigation and debugging; postprocessing and data presentation; data interpretation; introduction to design optimization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1630; PLAN: Bioengineering

BIOENG 1383 - BIOMEDICAL OPTICAL MICROSCOPY

Minimum Credits: 3
Maximum Credits: 3
Optical imaging microscopy techniques have become essential tools to investigate biological processes and diagnose diseases at unprecedented cellular and molecular levels. Biomedical researchers have an increasingly important need both to understand the advantages and limitations of the various types of optical microscopy and to apply the appropriate microscopy technique to solve specific biomedical problems. Biomedical optical microscopy is a comprehensive exploration of the basic principles of optical microscopy and imaging techniques commonly used in biomedical research. Upon completion of the course, the student should be conversant in the basic principles of common optical imaging microscopy techniques, able to apply an optical microscopy technique to address biological questions, and able to perform basic quantitative image analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1075 or (PHYS 0102 or PHYS 0111 or PHYS 0175 or PHYS 0476 or PHYS 1306 or PHYS 1361) PLAN: Bioengineering

BIOENG 1533 - CONTROLLED DRUG DELIVERY

Minimum Credits: 3
Maximum Credits: 3
Controlled drug delivery explores the physics, chemistry, and material science rationale behind the engineering of controlled drug delivery systems, which stands as a 114 billion dollar industry. To this end, the course focuses on topics at the interface between chemical engineering and medicine, such as polymer chemistry, biomaterials, pharmacokinetics, and transport phenomena. Pertinent pharmaceutical examples that are discussed include: transdermal, aerosol, oral, gene, and targeted cellular delivery, with emphasis placed on fabrication considerations and the relevant physiological environment. Upon completing the course, the student should be able to state the constraints on material properties posed by the physiological environment; use the fundamentals of polymers, diffusion, degradation, modeling and pharmacokinetics to solve problems specific to controlled drug delivery; and demonstrate ability to search and summarize primary research literature, write a review article, and deliver a cohesive oral presentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1220 and (BIOSC 1000 or BIOSC 1810 or CHEM 1810); PLAN: Bioengineering

BIOENG 1580 - BIOMEDICAL APPLICATION FOR SIGNAL PROCESSING

Minimum Credits: 4
Maximum Credits: 4
The fundamentals of digital signal processing of time series are developed, via applied exercises and projects with a focus on medical and biological signal analysis and interpretation. Depending on data availability, biomedical applications are selected from a variety of areas, such as biomechanics (gait and balance), neural and electrophysiological signals, and animal vocalizations, among others. Upon completion of this course, students should be able to properly acquire data in digital form; perform conventional methods of spectral analysis, for both stationary and non-stationary (or time-varying) signals; implement and apply linear time-invariant discrete-time filters; and demonstrate basic skills in digital signal processing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1320 and (ENGR 0012 or ENGR 0712 or ENGR 0716); PLAN: Bioengineering

BIOENG 1586 - QUANTITATIVE SYSTEMS NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
Systems neuroscience is the field that attempts to relate the activity of networks of neurons to perception, cognition, and behavior. This HONORS course examines major scientific results in systems neuroscience, and the computational principles of brain function they illustrate. Neuroscience topics include sensory transduction, visual processing, motor control, and neural prosthetics. Students learn to apply techniques from signals and systems, statistics, machine learning, information theory, and control theory to problems in neuroscience. Course format consists of interactive lectures, student-led discussions of important publications in neuroscience, guided analysis of neuroscience data, and designing an original set of experiments. Course Objectives: Upon completing the course, students will be able to:Describe organizing principles of brain function, from biological and theoretical perspectives; Apply statistics, signal processing, and machine learning techniques to the analysis of biological data sets; Design novel experiments, analyses, and data interpretation; Demonstrate critical evaluation of scientific and technical literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (BIOENG 1071 or BIOENG 1072) and BIOENG 1320; PLAN: Bioengineering (BSE or BEH)

BIOENG 1615 - INTRODUCTION TO NEURAL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This is an introductory neural engineering course for upper level undergraduate and graduate students interested in implantable cortical neural interface technology and research. The course covers two main topics; 1) basic neuroscience principles that govern neural interface engineering (ion channel biophysics, overview of different neuronal and non-neuronal cell types and how they interact with implantable microelectrodes, the basics of cortical organization, simple signal propagation through these neuronal networks, and how these signals can be extracted with implantable microelectrodes). 2) Overview of biological and engineering technologies and methodologies used in neural engineering research as well as their capabilities and limitations. Students will be provided raw neural recording and histology datasets, and will learn to assemble MATLAB based tools for basic signal processing and analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Bioengineering

BIOENG 1620 - INTRODUCTION TO TISSUE ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Tissue engineering (TE) is defined as the development and manipulation of laboratory-grown molecules, cells, tissues, or organs to replace and/or support the function of injured body parts. TE is highly interdisciplinary and therefore crosses numerous engineering and medical specialties. The course introduces students to the fundamentals of TE and the biomaterials, cells and growth factors used in TE through consideration of cell and tissue biology, biomaterials, drug delivery, engineering methods and design, and clinical implementation. Specific applications include skin, nerve, bone, and soft tissue regeneration. Throughout the course ties are made between the topic of study and clinically relevant situations. Upon completing this course, students should be able to: describe basic principles behind human cell and tissue biology and cell; describe the general types of biomaterials used in tissue engineering; describe techniques utilized to design, fabricate, and functionally assess tissue engineering systems; and, apply the combined knowledge of tissue organization and tissue engineering strategies to design a unique, reasonable tissue engineering solution.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1810; PLAN: Bioengineering

BIOENG 1630 - BIOMECHANICS 1-MECHANICAL PRINCIPLES BIOLOGICAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Biomechanics 1 is a first course in undergraduate biomechanics that applies and builds on the concepts of statics, dynamics, and mechanics of materials as applied to human activities and tissues. After briefly reviewing equilibrium concepts and free body diagrams as applied to the human body, principles from kinetics are used to develop dynamic descriptions of human motion. Finally, engineering concepts employed in description of the fundamental strength of materials are applied to biological tissues. After completion of the course, students should be able to describe the general characteristics and material properties for tissue and organs studied in the course, analyze the forces at a skeletal joint for various static and dynamic human activities, state and use the concepts of balance and stability in describing human motion, and compute the stresses and strains in biological tissues, given loading conditions and material properties.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0135; PLAN: Bioengineering

BIOENG 1631 - BIOMECHANICS 2: INTRODUCTION TO BIODYNAMICS AND BIOSOLID MECHANICS

Minimum Credits: 3
Maximum Credits: 3
Modern biomechanics is an increasingly diverse field that encompasses the mechanics of the whole body, all the way down to the cellular and molecular levels. Students are introduced to fundamental concepts and techniques of biodynamics and bio solid mechanics which provide the basis for biomechanics 3 and 4. General approaches used in mechanics are introduced throughout the semester and applied in several laboratories. Upon completing the course, the student should be able to demonstrate recall of functional anatomy of musculoskeletal system perform inverse dynamic analyses describe the principles of basic muscle biomechanics perform analyses of deformable bodies (including viscoelastic materials) describe general experimental techniques for rigid and deformable body analyses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1630; PROG: Swanson School of Engineering

BIOENG 1632 - BIOMECHANICS 3: BIODYNAMICS OF MOVEMENT

Minimum Credits: 3
Maximum Credits: 3
Biodynamics, the area of focus in biomechanics 3, is the study of large-scale movements in biologic systems. As such, the course focuses on the analysis of human movement, which is used in clinical and research settings to understand how various pathologies impact movement and how interventions can be implemented to aid those affected by movement disorders. We cover the fundamentals of biomechanics of human movement using mechanical modeling techniques. The major focus is kinematic analyses in three dimensions using matrix techniques. Some fundamentals of kinetics are covered as well, 2d and 3d inverse dynamics. Upon completing the course, the student should be able to describe basic methods of kinematic/kinetic analysis used in multi-link systems and be able to implement the methods in the analysis of human movement. Students should also be able to apply the methods to study common human movements, e.g. gait analyses, eye movement analyses, etc. Finally, students should be able to use the computer programming language, mat lab, to perform computations on kinematic data.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1631 and MATH 0280 and (ENGR 0012 or ENGR 0712 or ENGR 0716); PLAN: Bioengineering

BIOENG 1633 - BIOMECHANICS 4 - BIOMECHANICS OF ORGANS, TISSUES, AND CELLS

Minimum Credits: 3
Maximum Credits: 3
Modern biomechanics is an increasingly diverse field that encompasses the mechanics of the whole human body, including all the way down to the cellular and molecular levels. Biomechanics 4 builds upon biomechanics fundamentals learned in BIOENG 1630 and BIOENG 1631 in building a comprehensive application of bio solid mechanics to describe the mechanical behavior of soft and hard biological tissues. The course provides fundamental concepts in the development and application of constitutive models, as well as a foundation for more advanced topics that are covered in graduate school. Mathematica (Wolfram Research, Inc.) Is used both in class and for assignments. Upon completing the course, the student should be able to formulate biomechanics constitutive models that describe soft and hard tissues and use Mathematica as a framework for exploring the impact of model parameters in the model description.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1631 and MATH 0280; PLAN: Bioengineering

BIOENG 1680 - BIOMEDICAL APPLICATIONS OF CONTROL

Minimum Credits: 4
Maximum Credits: 4
The effect of feedback control on analysis and design is explored, with an emphasis on biological and physiological systems. Course Objectives : Upon completing this course, students should be able to: Construct mathematical models of physiological systems; Analyze temporal dynamics of a physiological system using linear systems concepts; Characterize the effects of feedback and controller on system performance; Design linear controllers to meet desired system specifications
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BIOENG 1320; PLAN: Bioengineering

BIOENG 1810 - BIOMATERIALS AND BIOCOMPATIBILITY

Minimum Credits: 3
Maximum Credits: 3
Undergraduate students are introduced to an advanced understanding of biomaterials and the use of biomaterial in areas such as tissue engineering, artificial organs, and implantable devices. Throughout the course, ties are made between the topic of study and clinically relevant biomaterial performance. The course introduces various biomaterials, such as polymers, metals, and ceramics, with the focus on biomaterial synthesis, characterization, structure-property relationship and surface modification. Biocompatibility issues of biomaterials will be discussed from different aspects such as protein adsorption, foreign body reaction, immune and inflammatory response, and sterilization. Finally, examples of clinical applications are discussed. Upon completing the course, the student should be able to: state the basic principles behind human tissue response to artificial surface implantation, describe the general types of materials used in soft and hard tissue replacements, drug delivery devices, and extracorporeal devices, describe techniques utilized to control the physiologic response to artificial surfaces, and identify various design strategies and clinical applications of biomaterials
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHEM 0320 and (BIOSC 1000 or BIOSC 1810 or CHEM 1810 or CHE 1530); PLAN: Bioengineering

BIOENG 2150 - MEDICAL PRODUCT IDEATION

Minimum Credits: 3
Maximum Credits: 3
A didactic class that explores the principles and use of "ethnography" as a tool to observe and document clinical activity in order to draft a clear statement of a clinical problem in need of solution and methods for concept generation to identify potential solutions. Students will be able to describe and use ethnographical techniques in identifying workplace problems and be able to describe and use concept generation methods to develop potential solutions. Topics covered: ethnography in the workplace; group brainstorming; brain-writing; affinitization; morphological analysis; basic human factors design.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Letter GRD
Course Requirements: PROG: Swanson School of Engineering

BIOENG 2151 - MEDICAL PRODUCT DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
A didactic course that uses principles of system engineering, the stage-gate process for medical product development and engineering and business analysis principles to evaluate the commercial potential proposed medical devices to further develop feasible solutions to a clinical problem identified in BIOENG 2150. Students will demonstrate use of systems engineering techniques to prioritize a set of feasible device and/or system solutions and ability to use intellectual property (IP) tools to determine suitability for further development. Students will demonstrate use of course principles in development of a commercialization plan for a proposed medical product. Design controls required by fad and international bodies; systems engineering methodologies; intellectual property (IP) and IP search tools; brief market analysis; size by region, growth, competition, barriers to entry, sustainable advantage; reimbursement issues for proposed medical device/system; basic financial analysis ' students will construct spreadsheets typically presented to senior business management. This will include estimates of costs, margins, break-even analysis, NPV, hurdle rates, ROI, IRR; codes, standards, and regulatory processes (FDA, IEC & ISO, UL, ministry of health (Japan), NRC, BRH, notified bodies, obtaining broad indications for use); safety, reliability, product liability considerations, manufacturability considerations (DFM ' design for manufacture, workflows)
Academic Career: Graduate
Course Component: Lecture
Grade Component: Letter GRD
Course Requirements: PREQ: BIOENG 2150; PROG: Swanson School of Engineering

ENGR 2811 - HACKING FOR DEFENSE

Minimum Credits: 3
Maximum Credits: 3
This course will teach students how to build products and services using lean methods. This will be done by solving real-world military and intelligence community problems. The course uses the lean launchpad platform for entrepreneurship. This is a highly customer-centered hypothesis-test approach to developing a mission modes, and is particularly well-suited for technology startups. It incorporates customer needs and user testing to build a minimum viable prototype. At the conclusion of the course, students will be able to understand the problems/needs of searching for product-market fit; understand all the stakeholders, deployment issues, costs, resources, and ultimate mission value; deliver minimum viable products that match customer needs in an extremely short time; produce a repeatable model that can be used to launch other potential technology solutions.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Letter GRD

Bioethics

BIOETH 1660 - PHILOSOPHY OF MEDICINE

Minimum Credits: 3
Maximum Credits: 3
Issues in Philosophy of Medicine, with reference to American health care, including concepts of health and disease, normativity, causation, error, clinical diagnosis, prevention, and epidemiological risk.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

BIOETH 1664 - BIOETHICS

Minimum Credits: 3
Maximum Credits: 3
Survey of major topics in bioethics, including informed consent, treatment refusal, transplantation, resource allocation, genetics, and public health.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

BIOETH 1668 - SUSTAINABILITY IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Latin America hosts some of the most biologically diverse and productive ecosystems on Earth, yet economic and social development are frequently at odds with efforts to conserve and use these ecosystems sustainably. This upper-level seminar focuses on the issues surrounding environmental sustainability in Latin America from a holistic, interdisciplinary perspective. The course will start with a general introduction to the three legs of sustainability and sustainable development theory, as well as the ecology and evolution of Neotropical biodiversity. We will use published primary literature to explore the particular complexities of Latin American sustainable development, and analyze case studies of moments through history in which environmental issues were either championed or de-emphasized. The course will feature several guest lectures, optional seminars for extra credit, and discussions of current sustainability news. Students will be responsible for a final research project and presentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

BIOETH 1669 - DIRECTED READINGS IN BIOETHICS

Minimum Credits: 1
Maximum Credits: 3
Students discuss with instructor a set of readings in bioethics. Topics and readings may vary.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

BIOETH 1698 - SPECIAL TOPICS IN BIOETHICS

Minimum Credits: 3
Maximum Credits: 3
Seminar on particular topics in bioethics; topics vary from term to term.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

Biological Sciences

BIOSC 0001 - BIOLOGICAL SCIENCES TRANSFER SEMINAR

Minimum Credits: 1
Maximum Credits: 1
This course for transfer students intending to major in biology will include topics such as study skills for biology courses, reading of primary literature, literature searches and citation managers, communicating with faculty, resources on campus, campus engagement, experiential learning opportunities, and career opportunities in biology.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

BIOSC 0041 - ANATOMY FOR THE HEALTH PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
This lecture course is designed to meet anatomy pre-requisites for students who are applying for admission to health profession programs but does not count towards any of the majors in biological sciences. Students will explore human functional and clinical gross anatomy organized by body region. Imaging techniques, disease pathologies, and case studies are utilized to enhance and apply lecture information. Co-enrollment with BIOSC 0042 is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: BIOSC 0042 (Min Grade 'C')

BIOSC 0042 - ANATOMY FOR THE HEALTH PROFESSIONS LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This laboratory course is designed to meet anatomy pre-requisites for students who are applying for admission to health profession programs but does not count towards any of the majors in biological sciences. This laboratory provides a visual opportunity to learn human anatomy through various tools, including skeletons, organ models, pathology specimens, virtual dissection, and histology slides. Lab modules are organized by body region. Co-enrollment with BIOSC 0041 is required.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: BIOSC 0041 (Min Grade 'C')

BIOSC 0050 - FOUNDATIONS OF BIOLOGY LABORATORY 1

Minimum Credits: 1
Maximum Credits: 1
This is the first course in a two-course sequence on the study of organisms in the laboratory and the field. We will work with techniques that are important in biology and apply these techniques to illustrate basic biological principles, with an emphasis on living organisms. The laboratory exercises focus on cell structure and function, basic cellular processes, plant structure and function, and basic animal anatomy and physiology.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0150 or 0715 or 0170 or 0190 or BIOL 0101 or 0110 (MIN GRADE: 'C' for all courses listed) or CREQ: BIOENG 1070

BIOSC 0057 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 1

Minimum Credits: 1
Maximum Credits: 1
This research-focused first-semester introductory biology lab uses real research projects to introduce biology as an experimental science. Students learn current laboratory techniques through an inquiry-based project or set of projects throughout the semester. Experiments can focus on genetics, molecular biology, evolution, and ecology. Topic for each section is listed under Meeting Information.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: BIOENG 1070; PREQ: (BIOSC 0150 or 0170 or 0715 or 0190) or (BIOL 0101 or 0110); Min Grade 'C'

BIOSC 0058 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 1

Minimum Credits: 1
Maximum Credits: 1
This is the first half of a two-part introductory biology lab that uses bacteriophage discovery to introduce biology as an experimental science. Students learn current laboratory techniques through discovery, isolation, and characterization of their own novel virus. Students will be introduced to concepts in microbiology, evolution, and molecular biology through hands-on experiments driven by results obtained during class. Students are expected to continue to the second half of the lab in BIOSC 0068.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

BIOSC 0060 - FOUNDATIONS OF BIOLOGY LABORATORY 2

Minimum Credits: 1
Maximum Credits: 1
This one-credit laboratory course is the second in a two-course sequence designed to be an introduction to scientific inquiry in the biological sciences for majors in biology and related fields. You will use genetics, biochemistry, and molecular biology to undertake authentic research exploring the evolution of metabolic pathways in different species.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0050 or 0057 or 0058 or 0070 or 0190 or BIOL 0101 or 0111) and (BIOSC 0160 or 0716 or 0180 or BIOL 0102 or 0120); Min Grade 'C'

BIOSC 0067 - FOUNDATIONS OF BIOLOGY RESEARCH LABORATORY 2

Minimum Credits: 1
Maximum Credits: 1
This research-focused second-semester introductory biology lab uses real research projects to introduce biology as an experimental science. Students learn current laboratory techniques through an inquiry-based project or set of projects throughout the semester. Experiments can focus on genetics, molecular biology, evolution, and ecology. Topic for each section is listed under Meeting Information.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0050 or 0057 or 0058 or 0070 or 0190 or BIOL 0101 or 0111) and (BIOSC 0160 or 0180 or 0716 or BIOL 0102 or 0120) or PREQ: (BIOSC 0050 or 0057 or 0058 or 0070 or 0190 or BIOL 0101 or 0111) and CREQ: BIOENG 1071 or 1072. Min Grade 'C'

BIOSC 0068 - FOUNDATIONS OF BIOLOGY SEA-PHAGES LABORATORY 2

Minimum Credits: 1
Maximum Credits: 1
This is the second half of a two-part introductory biology lab that uses bacteriophage discovery to introduce biology as an experimental science. Students learn current computational biological techniques through annotation and characterization of novel viral genomes and current lab techniques through advanced phage biology experiments. Students will be introduced to concepts in bioinformatics, microbiology, evolution, and molecular biology through hands-on experiments driven by results obtained during class.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0058; Min Grade 'C'

BIOSC 0100 - PREPARATION FOR BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is intended for students who have not had high school biology in the past five years to prepare them for taking Foundations of Biology 1 (BIOSC 0150) and 2 (BIOSC 0160). The lecture will cover a subset of topics from Foundations of Biology 1 and 2, including a discussion of basic chemistry used in biology, cell biology including mitosis and meiosis, an introduction to genetics and molecular biology. The weekly recitations will explore topics covered in lecture in more depth and integrate problem solving and study skills. Some laboratory exercises may also be included in the recitation period to re-enforce the lecture topics by giving students the opportunity to investigate the experimental aspect of biology. The laboratory exercises and assignments will focus on data analysis, problem-solving and writing skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1

Minimum Credits: 3
Maximum Credits: 3
This introductory course in biology is divided into two parts. The first part covers the cellular basis of life including a discussion of simple chemistry; cells as units of structure and function; and energy transformations. The second part includes an examination of those functions common to all organisms such as nutrition, gas and fluid transport, and hormonal and neuronal control. Throughout, the emphasis is on the mechanisms used to accomplish these basic functions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Pre-Assessment is required, instructions for completing the pre-assessment are found at: tinyurl.com/BIOSC0150
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

BIOSC 0155 - HONORS FOUNDATIONS OF BIOLOGY 1

Minimum Credits: 4
Maximum Credits: 4
This course covers biological phenomena at the cellular level: macromolecules, cell structure, photosynthesis, cell respiration, homeostasis, signaling and genetics. The experimental basis supporting our understanding of these processes will be introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Advanced Placement Biology Test Score equal/greater 4 or International Baccalaureate Biology Score equal/greater 5

BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2

Minimum Credits: 3
Maximum Credits: 3
This introductory course covers the basic principles of genetics, evolution, and ecology. Emphasis will be placed on the experimental and observational basis for our knowledge of these subjects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0150 or 0715 or 0170 or 0190) or (BIOL 0101 or 0110); Min Grade 'C'
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

BIOSC 0165 - HONORS FOUNDATIONS OF BIOLOGY 2

Minimum Credits: 4
Maximum Credits: 4
This course will cover the cell cycle, DNA replication, transcription, translation, molecular biology, biotechnology, genomics and bioinformatics, plant development, and animal development. The experimental basis supporting our understanding of these processes will be introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0155 (MIN GRADE: 'C') or Advanced Placement Biology Test Score equal/greater 5 or International Baccalaureate Biology Score equal/greater 7

BIOSC 0200 - TEACHING BIOLOGICAL SCIENCES

Minimum Credits: 1
Maximum Credits: 3
Teaching biology is a complex and multi-faceted challenge. It requires the integration of deep disciplinary knowledge with a functional understanding of learning theory and the development of practical skills for working with students. Teaching biological sciences is designed to help you explore multiple strategies for effective teaching and learning and refine your own understanding of biology through efforts to become a better science communicator. The course has both seminar and project based components. You are encouraged to coordinate your work in this course with existing teaching opportunities but this is not required.
Academic Career: Undergraduate
Course Component: Practicum

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180) or (BIOL 0102 or 0120); Min Grade 'C'

BIOSC 0350 - GENETICS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to examine the gene in the following dimensions: the gene as a unit of transmission, a unit of function, and a unit of mutation. In addition, the distribution and activity of genes in populations will be considered in the context of current theories of evolution.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180) or (BIOENG 1071 or 1072) or (BIOL 0102 or 0120) and (CHEM 0120 or 0102 or 0112 or 0420 or 0720 or 0770 or 0970); Min Grade 'C'

BIOSC 0351 - GENETICS LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Laboratory exercises designed to illustrate the major principles of genetics.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121); Min Grade 'C'; CREQ: (BIOSC 0350 or 0355 or BIOL 0350 or 0203); Min Grade 'C'

BIOSC 0352 - INTRODUCTION TO MOLECULAR GENETICS LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Molecular genetics uses precise genome engineering to address increasingly sophisticated biological questions. In this course students will participate in an authentic research project, for example creating new mutations using current recombinant techniques and testing the biological consequences.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121) and (BIOSC 0350 or 0355 or BIOL 0203 or 0350); Min Grade "C"

BIOSC 0355 - UHC GENETICS

Minimum Credits: 4
Maximum Credits: 4
This course is designed to examine the gene as a unit of transmission, a unit of function, and a unit of mutation. The course emphasizes the relationship between classical mendelian genetics and the modern molecular understanding of gene structure and function. Recitations are used for week ly problem sets and discussion of exercises in the virtual flylab, an internet-based simulation of genetic experiments with the fruit fly drosophila melanogaster.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL (0102 or 0120)] and [CHEM 0120 or 0720 or 0102 or (0112 and 0114)]; Min Grade 'C' for all classes listed.
Course Attributes: University Honors Course

BIOSC 0370 - ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
The objective of the course is to provide a broad introduction to the study of ecology at the undergraduate level, through the presentation of lectures dealing with organismal, population, community, and ecosystem levels of hierarchical organization. The contributions of laboratory and field investigations to the development of ecological knowledge will be considered.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all classes listed.
Course Attributes: Global Studies

BIOSC 0390 - ECOLOGY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
The objective of the laboratory course is to provide students with practical experience in ecological methods and in the design, conduct, and analysis of ecological studies. Laboratory exercises are designed to correspond with major lecture topics presented in BIOSC 0370. Exercises will include laboratory and field studies.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0060 or 0067 or 0068 or 0080 or 0191 or BIOL 0102 or 0121; CREQ: BIOSC 0370 or 0371 or BIOL 1430 or 1515; Min Grade 'C' for all classes listed.

BIOSC 0391 - ECOLOGY LABORATORY WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Course is a writing practicum for ecology laboratory, BIOSC 0390. Students will prepare laboratory reports and write essays based on exercises and assignments for the companion course, BIOSC 0390. The reports and essays will be returned with instructor comments for student revision and resubmission.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 0390; PLAN: Ecology and Evolution (BS)
Course Attributes: Writing Requirement Course

BIOSC 0715 - UHC FOUNDATIONS OF BIOLOGY 1

Minimum Credits: 3
Maximum Credits: 3
This course covers biological phenomena at the cellular level: macromolecules, cell structure, photosynthesis, cell respiration, homeostasis, signaling and genetics. The experimental basis supporting our understanding of these processes will be introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Advanced Placement Biology Test Score equal/greater 4 or International Baccalaureate Biology Score equal/greater 5
Course Attributes: DSAS Natural Science General Ed. Requirement, University Honors Course

BIOSC 0716 - UHC FOUNDATIONS OF BIOLOGY 2

Minimum Credits: 3
Maximum Credits: 3
This course will cover the cell cycle, DNA replication, transcription, translation, molecular biology, biotechnology, genomics and bioinformatics, plant development, and animal development. The experimental basis supporting our understanding of these processes will be introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0715 (MIN GRADE: 'C') or Advanced Placement Biology Test Score equal/greater 5 or International Baccalaureate Biology Score equal/greater 7
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

BIOSC 0740 - YELLOWSTONE FIELD COURSE

Minimum Credits: 4
Maximum Credits: 4
The honors program of the University of Pittsburgh, in conjunction with the Department of BIOSC, has developed a summer field course in ecology

which will be held in and adjacent to the yellow stone region of Wyoming and Montana. Field study opportunities will be emphasized and will comprise approximately 50% of the student contact hours.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

BIOSC 0805 - THE HUMAN BODY FOR NON-MAJORS

Minimum Credits: 3
Maximum Credits: 3
This is a course in human biology and physiology for students not majoring in biology. The goal is to provide students with an understanding of fundamental principles of life with an emphasis on the human body. The course will cover basic biochemistry and cell biology and then move to the structure and function of human organ systems. An essential part of the course is discussion of current issues, such as infectious, autoimmune and neurodegenerative diseases; asthma and allergy; nutrition and health; stem cells research and cloning; and methods of contraception and reproductive technologies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

BIOSC 0815 - GENES AND DISEASES FOR NON- MAJORS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to give students not majoring in biology the essential background in genetics and evolution to understand human disease. The material covered includes the fundamental principles of genetics, the role of genes and environment in various diseases, genomics, and the role of evolution. An essential part of the course is the discussion of current issues, such as genetic diseases, genetic screening, reproductive cloning, gene therapy, genetic basis of cancer, and emerging and reemerging diseases.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

BIOSC 0825 - SPECIAL TOPICS IN BIOLOGY FOR NON-MAJORS

Minimum Credits: 1
Maximum Credits: 3
A major topic in biology will be developed and explored by students.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

BIOSC 0835 - OUR CHANGING WORLD FOR NON-MAJORS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the evolutionary and ecological forces that change our world. We will consider how organisms change over time (evolution), how they interact with each other and with their environment (ecology), and how they assemble as communities and ecosystems. We will then apply these concepts to understand how human activity is changing the biosphere.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

BIOSC 1000 - BIOCHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide students with a basic understanding of the principles and underlying themes of modern biochemistry. The course includes all the major topics in biochemistry in considerable depth including thermodynamics and enzymology, protein and nucleic acid structure, function, and synthesis, lipids and membranes as well as metabolic pathways. This course will require that you master a new vocabulary including

chemical structures, and there is an emphasis throughout on experimental approaches, molecular mechanisms, and problem solving. Although the same topics will be covered as in the two semester biochemistry series (BIOSC 1810-1820), no one topic in BIOSC 1000 will be covered in as much detail.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOENG 1071 or BIOENG 1072 or BIOL 0102 or 0120 and (CHEM 0120 or 0102 or 0112 or 0420 or 0720 or 0770 or 0970) (Min Grade 'C' for these courses) and (CHEM 0310 or 0350 or 0730 or 0206 or 0231)

BIOSC 1005 - INTRODUCTION TO BIOCHEMISTRY LAB

Minimum Credits: 1
Maximum Credits: 1
This course will guide students through a common experimental approach that is used in academic and industry research labs. In the first part of the semester, students will clone genes that have been selected because they are new genes of interest to research labs within the department. In the second part of the semester, students will express their cloned genes and purify the encoded proteins. They will use computer analysis to predict possible functions of their proteins and then test their hypotheses using biochemical techniques.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0080 or 0191) or (BIOL 0102 or 0121); CREQ: BIOSC 1000; Min Grade 'C' for all courses listed

BIOSC 1010 - COMMUNICATING IN THE BIOLOGICAL SCIENCES

Minimum Credits: 2
Maximum Credits: 2
Conventions of scientific communication will be taught in this junior/senior level course as students learn to locate, read, and analyze primary literature in preparation for writing and revising a clear and concise review article. Students also prepare and revise an oral presentation of their review topic. Attention to document design, argument construction, verbal communication, and presenting skills will be taught and practiced. In addition to instructor led workshops, extensive peer review exercises are incorporated to help students develop evaluation skills and learn to incorporate feedback.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ:(BIOSC 0350or0355or0370or0371or1000or1810or1130)or(BIOL 0203or0350or1430or1515);MinGrad 'C';and(PREQ:ENG0102orENGCMP(0002or0006or 0020or0200or0203or0205or0207or0208or0210or0212) or ENGFLM 0210 or FP (0003 or 0006);LVL:JrorSr;PLAN:BIOSC-BS
Course Attributes: Capstone Course, Writing Intensive Course (WRIT)

BIOSC 1070 - HUMAN PHYSIOLOGY-UHC

Minimum Credits: 4
Maximum Credits: 4
After a general introduction on cell biology, muscle physiology, and intracellular communication, this course will examine the function of the following systems: cardiovascular, respiratory, renal, gastrointestinal and immune. The systems will be considered in the context of the function of the body as a whole, and how they respond during challenges (e.g. exercise) and pathological states. Current research related to the functioning of these systems will be emphasized throughout the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180) or (BIOL 0102 or 0120) or (BIOENG 1071 or 1072) and [CHEM 0120 or 0720 or 0770 or 0970 or 0102 or (0112 and 0114)]; Min Grade 'C' for all courses listed
Course Attributes: University Honors Course

BIOSC 1080 - HUMAN ANATOMY AND PHYSIOLOGY

Minimum Credits: 6
Maximum Credits: 6
This course is an introduction to the study of human structure and function. We will take a systems approach to study the anatomy of the human body and its normal function and maintenance. Each system will be examined from the perspective of development, tissue structure, adult anatomy and physiology. Lectures will assume that the student has had the equivalent of a major's level college course in introductory biology and introductory chemistry.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120) and [CHEM 0120 or 0720 or 0101 or (0112 and 0114)]; Min Grade 'C' for all courses listed

BIOSC 1120 - BIOSTATISTICS

Minimum Credits: 3
Maximum Credits: 3
This course provides students the knowledge on applications of statistical technique to biological problems. The data fit, regression analysis, significance of correlation coefficient and of standard error of estimate will be discussed. The binomial, normal, and Poisson distributions, the student's t-distribution and the chi-squared distribution will be introduced. Hypothesis testing, significance levels, confidence limits for large and small samples and non-para metric statistics will be covered. Basic computer programming (use of BMDP and statview) will be introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120) and (BIOSC 0350 or 0355 or 0370 or 0371 or 1000 or 1810 or BIOL 0203 or 0350 or 1430 or 1515) and STAT 1000; MIN GRADE 'C' for all courses

BIOSC 1130 - EVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to biological evolution. The theory, process and pattern of evolutionary change are presented. This course will encompass both micro evolutionary and macro evolutionary concepts. Lecture topics will include inheritance and variation, population genetics, natural selection, speciation, adaptation, the fossil record, and phylogenetic.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0350 or 0355 or BIOL 0203 or 0350; Min Grade 'C' for all courses listed

BIOSC 1131 - EVOLUTION LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This laboratory course is designed to introduce students to the practice of evolutionary biology. Students will design and conduct experiments involving living organisms, as well as perform computer simulations, that demonstrate evolutionary processes.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0060 or 0067 or 0068 or 0080 or BIOL 0102 or 0121; MIN GRADE 'C' CREQ: BIOSC 1130 or BIOL (1165 or 1435)

BIOSC 1140 - BEHAVIORAL ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
Behavior is studied from an evolutionary perspective. Current models of foraging, mating, and social behavior are evaluated through classroom and field work.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1160 - FOREST ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
Study of environmental factors and their influence on reproduction, growth, and development of individual trees and forest stands. Provides the biological basis for forest resources management.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1170 - FRESHWATER ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
A field-oriented study of lakes, reservoirs, and streams as dynamic systems. Emphasis will be placed on the use of quantitative sampling and analytical techniques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1180 - ECOLOGY OF AMPHIBIANS AND REPTILES

Minimum Credits: 3
Maximum Credits: 3
This course will include the ecology, evaluation, identification techniques, habitats, and life histories of amphibians and reptiles. While emphasis will be on the amphibians and reptiles of western Pennsylvania, those species occurring in the bordering states of Ohio, New York, and west Virginia will also be studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0180 or 0191 or 0716 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1190 - AQUATIC ENTOMOLOGY

Minimum Credits: 3
Maximum Credits: 3
An introduction to aquatic insects. Subjects emphasized will include ecology, morphology, evolution, habitats, and identification. Field and laboratory experiences will be supplemented with lectures and selected readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180) or (BIOL 0102 or 0120); Min Grade 'C' for all courses

BIOSC 1200 - VERTEBRATE MORPHOLOGY

Minimum Credits: 3
Maximum Credits: 3
A study of the gross anatomy, histology, development, and evolution of the vertebrate body. Topics: vertebrate origin, phylogeny, and classification; basic histology; early embryology; evolutionary morphology; integument; skeletal system; muscular system; sense organs; nervous system; endocrine system; body cavity and mesenteries; digestive system; respiratory system; circulatory system; excretory system; reproductive system. Each system is examined in terms of its embryonic development, histology, functional anatomy, and evolutionary history. General principles of evolutionary morphology are emphasized. The purpose of the course is to provide an understanding of the history and functional anatomy of the body. It is designed as a background for studies in embryology, physiology, systematics, and human anatomy and physiology in professional schools.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1205 - VERTEBRATE MORPHOLOGY LAB

Minimum Credits: 1
Maximum Credits: 1
This is a laboratory to accompany BIOSC 1200. Students will dissect a shark and a cat, study various skeletons, and examine histology slides. The purposes of the course are to illustrate the structures discussed in the BIOSC 1200 lectures and to give the student the personal experience of learning animal structure through dissection and observation.
Academic Career: Undergraduate
Course Component: Credit Laboratory

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0080 or 0191) or (BIOL 0102 or 0121); CREQ: BIOSC 1200; Min Grade 'C' for all courses listed

BIOSC 1220 - ECOLOGICAL FIELD STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course provides extensive field experience for undergraduates and will focus on developing the skills necessary for any practicing ecologist. Students will be involved in all stages of field projects including both individual and group exercises. Using a combination of lecture, extensive readings from the primary literature and hands-on field projects, the instructor will assist the students in gaining a proficiency with the background knowledge, thinking skills and technological tools necessary to conduct empirical ecological investigations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1221 - URBAN ECOLOGICAL FIELD STUDIES

Minimum Credits: 1
Maximum Credits: 1
This course provides extensive field experience for undergraduates and will focus on developing the skills necessary for any practicing ecologist. Students will be involved in all stages of field projects including both individual and group exercises. Using a combination of lecture, extensive readings from the primary literature and hands-on field projects, the instructor will assist the students in gaining a proficiency with the background knowledge, thinking skills and technological tools necessary to conduct empirical ecological investigations.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0080 or 0191 or BIOL 0102 or 0121) and (BIOSC 0370 or 0371 or BIOL1430 or 1515 or GEOL 1641); Min Grade 'C' for all courses listed.

BIOSC 1230 - ORNITHOLOGY

Minimum Credits: 3
Maximum Credits: 3
The study of birds with a field-oriented emphasis revolving around the late spring migrants and the breeding species in a wide variety of habitats. Classroom topics will include study skins, nests, eggs, and the annual cycle.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716) or (BIOL 0102 or 0120); Min Grade 'C' for all courses listed

BIOSC 1250 - HUMAN PHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
After a general introduction on cell biology, physiology of nerves and muscle, and intercellular communication, this course will survey the function of the following systems: cardiovascular, respiratory, renal, and gastrointestinal. Each system discussed will be integrated into the larger function of homeostatic and their adaptation during pathology and challenges (e.g., exercise).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOENG 1071 or BIOENG 1072 or BIOL 0102 or 0120) and (CHEM 0120 or 0102 or 0112 or 0420 or 0720 or 0770 or 0970);Min Grade 'C' for these courses

BIOSC 1255 - PHYSIOLOGY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This laboratory course complements BIOSC 1250 human physiology. Students will spend the first half of the semester developing their skills by measuring homeostatic parameters of the human body (blood pressure, blood chemistry, muscle response, etc.). They will then use that knowledge to design and perform experiments modeled after conditions of both eustress (exercise) and distress (disease). In addition to weekly assignments,

students will be required to present the results of their research projects.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0191 or 0080) or (BIOL 0102 or 0121); (MIN GRADE 'C' for listed courses); CREQ: (BIOSC 1250 or 1070 or 1080) or (NROSC 1070 or 1250)

BIOSC 1270 - ECOLOGY OF FISH

Minimum Credits: 3
Maximum Credits: 3
A field course dealing with the interrelationships of fish and the biotic and abiotic environment. Improvements of aquatic habitat and applied aspects of the ecology of fish and fishery biology will be studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716) or (BIOL 0102 or 0120); Min Grade 'C' for all courses listed

BIOSC 1275 - GENOMICS

Minimum Credits: 3
Maximum Credits: 3
The sequencing of the human genome has revolutionized the way in which we think about diverse biological topics. This course will explore how advances in our understanding of such subjects have been made possible by innovative sequencing technologies. This course will combine lecture, roundtable discussions and group presentations to explore how such technologies have allowed scientists to analyze genome-wide correlations between species to ultimately provide deeper insight into genome structure and function, the evolution of genomes, and the greater roles of genome analysis and editing in modern medicine.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0350 or 0355) or (BIOL 0203 or 0350); MIN GRADE 'C' for all courses

BIOSC 1280 - MICROBIAL GENETIC ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course will consist of a series of lectures discussing the molecular genetics of prokaryotic and eukaryotic microbes and ways in which they can be genetically engineered. It includes: (1) the genome structures of microbes, (2) classic methods for genetic exchange, (3) current approaches to genetic engineering, (4) applications of genetic engineering to human disease. Visits to the computer lab will introduce web-based analysis of microbial genome sequences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1850 and (BIOSC 0350 or BIOSC 0355 or BIOL 0350 or BIOL 0203); Min Grade 'C' for all courses listed

BIOSC 1285 - GENOMICS LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121) and (BIOSC 0350 or 0355 or BIOL 0203 or 0350); PROG: School of Arts and Sciences (UA-S); Min Grade 'C' for all courses listed

BIOSC 1290 - EXPERIMENTAL GENETIC ENGINEERING LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This is a laboratory course focusing on the genetic engineering of prokaryotic and eukaryotic microbes. During this course, students will isolate novel mutants of a specific microbe and employ both traditional genetic approaches and current methods in molecular microbiology to clone, characterize and sequence the mutant alleles.

Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 1855 or 1860) and (BIOSC 0350 or BIOSC 0355 or BIOL 1315 or BIOL 0350); Min Grade 'C' for all courses listed

BIOSC 1291 - EXPERIMENTAL GENETIC ENGINEERING WRITNG PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is a writing practicum for experimental genetic engineering. Students will write three short laboratory reports based on work done in the corequisite course BIOSC 1290, and revise these, based on instructor comments, to form a final integrated paper.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1290 (Min Grade 'C'); PLAN: Microbiology (BS)
Course Attributes: Writing Requirement Course

BIOSC 1310 - WETLAND ECOLOGY AND MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716) or (BIOL 0102 or 0120); Min Grade 'C' for all courses listed

BIOSC 1320 - POPULATION BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course focuses on ecological and evolutionary processes at the population level. We will learn how to represent ecological and evolutionary dynamics using increasingly realistic mathematical models. We will first explore population ecology including models of single populations, meta-populations, and interactions between species. We then shift to population and evolutionary genetics studying how the mechanisms of evolution interact with each other. Finally, we will study the explicit interaction between ecological and evolutionary processes that can occur over short timescales.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0370 or 0371 or BIOL 1430 or 1515; Min Grade 'C' for all courses listed CREQ: BIOSC 1130 or BIOL (1165 or 1435)

BIOSC 1330 - FIELD BOTANY

Minimum Credits: 3
Maximum Credits: 3
Identification of native herbaceous and woody plants in terrestrial communities and the methods of quantifying their relative numbers, mass, and ecological relationships.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1340 - FIELD ENTOMOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is offered at the Pymatuning laboratory of ecology field station. An introduction to the amazing taxonomic and ecological diversity of insects and their close relatives in the phylum Arthropoda. Emphasis will be placed on the collection and identification of the adult stages. Field and laboratory exercises will be supplemented with lectures and selected readings.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1350 - PLANT BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will present an in-depth discussion of plant structure, function, and development in an ecological and evolutionary context. In addition, this course will survey the plant kingdom and related taxa with a focus on the evolution of these groups.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1360 - ECOLOGY OF FUNGI

Minimum Credits: 3
Maximum Credits: 3
A survey of the fungi and their interrelationships with abiotic and biotic factors in the environment. Adaptations will be studied in the field of laboratory using both aquatic and terrestrial fungi. Special emphasis will be placed on identification of the larger basidiomycetes (mushrooms).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 180 or 0191 or 0716 or BIOL 0102 or 0120; Min Grade 'C' for all courses listed

BIOSC 1375 - TROPICAL BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will provide an introduction to ecological and evolutionary studies of living organisms in the tropics. The course will focus on major themes in ecology and evolution as they play out in the tropics, the most biodiverse region of the globe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0180 or 0191 or BIOL 0102 or 0120 (MIN GRADE 'C')

BIOSC 1380 - GLOBAL ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
Compelling evidence points to the 1990's as the decade of environmental crisis. Human quality of life, and probably survival, likely depends more on treaties about land, air, and water than on weaponry. This course will examine environmental issues of the decade and the basic concepts of the fundamental environmental science - ecology - that underlie them. The nature of key environmental changes, their extent and rates, will be considered, along with likely consequences and possible solutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716) or (BIOL 0102 or 0120) (MIN GRADE 'C')

BIOSC 1390 - FIELD TECHNIQUES IN ECOLOGY AND CONSERVATION

Minimum Credits: 3
Maximum Credits: 3
This course introduces a variety of field and research techniques used in ecology and conservation, including experimental design, sampling design, and techniques in sampling plants and animals in forests, fields, and aquatic habitats. It will also include an introduction to radio telemetry and the use of GIS and GPS systems. Student projects will be presented at the end of the course. Collectively, these experiences will expose students to important research techniques in biology and prepare them for opportunities to conduct research with researchers in the fields of ecology, evolution, and conservation biology.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716) or (BIOL 0102 or 0120) (MIN GRADE 'C')

BIOSC 1400 - DISEASE ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
This field course will take an ecological approach to the study of infectious diseases. We will explore relationships between parasites (pathogens), their hosts and the environment in which they interact, with the objective of developing an understanding of how parasites (pathogens) spread through, persist in, and impact host populations. The course will include lectures, student-led discussions, field work, and lab-based activities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0370 or 0371 or BIOL 1430 or 1515; Min Grade 'C'

BIOSC 1420 - WILDLIFE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This field course will address the principles that guide natural resource professionals in management of wildlife, including those used in management of game animals for harvest, in maintenance and restoration of viable populations, and in ecosystem management. The application of principles to actual problems in management and conservation of wildlife populations is emphasized including the techniques used to reduce, maintain, and increase population densities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716) or (BIOL 0102 or 0120) (MIN GRADE 'C')

BIOSC 1430 - ECOPHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
The adaptations of animals to deal with specialized environmental situations are studied across a spectrum of biological levels from biochemical to organismal. Topics such as thermal relations, water balance, and bioenergetics are considered. Biosc 1430 and 1435 are considered course repeats with similar material covered as a field course or a lecture course, respectively
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180) or (BIOL 0102 or 0120) and (CHEM 0120 or 0720 or 0770 or 0970 or 0102 or (CHEM 0112 and 0114)); (Min Grade 'C')

BIOSC 1435 - ENVIRONMENTAL PHYSIOLOGY OF ANIMALS

Minimum Credits: 3
Maximum Credits: 3
This course in ecophysiology is a physiology course taught from an ecological and evolutionary perspective. The organismal, ecological, and evolutionary significance of physiological function will be emphasized along with molecular and cellular mechanisms. BIOSC 1430 and 1435 are considered course repeats with similar material covered as a field course or a lecture course, respectively.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0370 or 0371 or BIOL 1430 or 1515: MIN GRADE: C

BIOSC 1440 - ANIMAL BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
This course examines the diversity of animal behavior from evolutionary and ecological points of view. We will examine how animals decide what to eat, where to live, how to compete with each other, and how to avoid predators. We also will investigate how animals choose who to mate with, when they should offer parental care, the conditions that favor social living, and how to best communicate. The lecture and recitation material is appropriate for more advanced students that have been trained in introductory biology and ecology.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0370 or 0371 or BIOL 1430 or 1515 (MIN GRADE 'C')

BIOSC 1445 - ANIMAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course addresses the extraordinary variety of ways that animals communicate with each other. We explore how animals produce and receive signals using sound, light, chemicals, mechanical pressure, and electricity. We then approach how such signals evolve by considering questions of optimality, decision making, information theory, and economics. We discuss the contexts in which signals are used, including aggression and dominance, mate attraction and courtship, cooperation and social signaling, and foraging. We conclude by extending to humans, plants, and microbes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0370 or 0371 or BIOL 1430 or 1515; (MIN GRADE 'C')

BIOSC 1450 - HISTOLOGY

Minimum Credits: 4
Maximum Credits: 4
Course is intended to show how embryonic rudiments build or gans and how tissues and cell types interact to produce the functional systems in the adult. The course covers descriptive, comparative, and experimental histology, but emphasizes the diversity of tissues in organs, and the differentiation of cell types.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

BIOSC 1455 - HUMAN ENDOCRINOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the physiology and anatomy of the human endocrine system. The molecular mechanisms of the synthesis, distribution, action, and regulation of hormones will be covered. Endocrine disorders including diabetes, Cushing's disease, Addison's disease, and parathyroid and calcium diseases will be studied to provide context. Additionally, we will cover the endocrine milieu of the developing embryo to adulthood and developmental disturbances during reproduction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: (BIOSC 1250 or 1070 or 1080) or (NROSCI 1070 or 1250) or CABIO 0206 or CHBIO 0302 or PHARM 5115 (ALL MIN GRADE 'C')

BIOSC 1470 - BIOPHYSICAL CHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This course will deal with fundamental physical chemical principles especially applicable in the study of molecular biology. Topics will include (1) thermodynamics and chemical equilibrium; (2) kinetic theory and transport; and (3) chemical and enzyme kinetics. These subjects will be richly highlighted with numerous examples from biological systems, and techniques for studying these systems will be described. The topics covered will be developed from a physical chemical point of view.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120) and (MATH 0230 or 0231) (MIN GRADE 'C')

BIOSC 1480 - EMBRYOLOGY

Minimum Credits: 3
Maximum Credits: 3
The development of some invertebrates' and vertebrates' eggs, embryos, organs and systems is examined in the light of basic concepts and problems of embryology, emphasizing the techniques, critical approaches, and analytic methods of experimental embryology.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)) and (BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120 (MIN GRADE 'C'))

BIOSC 1490 - EMBRYOLOGY LABORATORY

Minimum Credits: 2
Maximum Credits: 2
The embryological development of the frog, chick and pig are intensively studied in microscopic preparations emphasizing the integration of temporal and spatial events with attention to homology and adaptation.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

BIOSC 1500 - CELL BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will be devoted to a discussion of the current state of our understanding of cell structure and function. Eukaryotic cells will be emphasized with particular attention to animal cells. However, prokaryotic cells will be discussed for comparative purposes. Course material will emphasize the experimental basis for our understanding of cell biology and the relationship between structure and function. Most of the techniques to be considered will involve biochemical and molecular biological approaches used in the study of cell function. Thus the course will assume a familiarity with the principles of biochemistry covered in the prerequisites and will not repeat this material. Topics will include membranes, the nucleus, mitochondria and chloroplasts, the cytoskeleton, cell motility, growth and division, endocytosis and exocytosis, and selected topics on the cellular biological aspects of cancer and the immune system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1000 or 1810 (MIN GRADE 'C')

BIOSC 1510 - CELL BIOLOGY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This experimental methods course is designed to give upper division majors and opportunity to learn modern techniques used in cell biology research. Students will master the fundamentals of light microscopy (bright field, phase contrast, and dark field) and explore more advanced techniques such as fluorescence, confocal, video, and differential interference contrast microscopy. Students will isolate plasma membranes, mitochondria, nuclei, brush borders, and flagella and characterize these organelles by microscopy, enzyme assays and antibody labeling.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0191 or 0080) or (BIOL 0102 or 0121); CREQ: BIOSC 1500 (MIN GRADE 'C'); PLAN: BIOSC Majors

BIOSC 1511 - CELL BIOLOGY LABORATORY WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is the writing practicum for cell biology laboratory, BIOSC 1510. Students will prepare laboratory reports based on exercises and assignments for the companion course, BIOSC 1510.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1510 (MIN GRADE 'C'); PLAN: Molecular Biology (BS)
Course Attributes: Writing Requirement Course

BIOSC 1520 - DEVELOPMENTAL BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
The mechanisms of animal development will be analyzed. The first half of the course will emphasize classic embryological investigations focusing on how the embryonic body plan becomes organized, while the second half will deal primarily with the genetic and molecular regulation of development. The experimental analysis of such processes as fertilization, morphogenetic movements, tissue interactions, pattern formation, and gene expression will be discussed using examples from a variety of animal embryos, and by discussion of the current research literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0350 or 0355 or BIOL 0350 or 0203 (MIN GRADE 'C')

BIOSC 1530 - DEVELOPMENTAL BIOLOGY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This laboratory course is designed to provide students with practical experience in the scientific method of experimental research with regard to animal development. Initial labs will stress observational skills, but the goal of each will be to understand the careful and deliberate process of experimental design, execution, and the interpretation of results. The importance of establishing and interpreting controls in experimental procedure will also be emphasized.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121; CREQ: BIOSC 1520 (ALL MIN GRADE 'C')

BIOSC 1531 - DEVELOPMENTAL BIOLOGY LABORATORY WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Course is a writing practicum for developmental biology laboratory, BIOSC 1530. Students will prepare laboratory reports and write essays based on exercises and assignments for the companion course, BIOSC 1530.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0200 or ENGR 0012 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102); CREQ: BIOSC 1530 (MIN GRADE 'C'); PLAN: Molecular Biology (BS)
Course Attributes: Writing Requirement Course

BIOSC 1540 - COMPUTATIONAL BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is designed to give students a broad understanding of how computational approaches can be used to solve problems in biology. Both the biological and computational underpinnings of the methods will be addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191or 0716) or (BIOL 0102 or 0120) (MIN GRADE 'C')

BIOSC 1542 - COMPUTATIONAL GENOMICS

Minimum Credits: 3
Maximum Credits: 3
This course will explore the use of computer-aided methods to generate and test biological hypotheses at whole-genome scales. Students will gain both a theoretical and practical understanding of working with genomic data typical of high-throughput sequencing technologies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1540 and (CS 0008 or 0011); MIN GRADE 'C'

BIOSC 1544 - SIMULATION AND MODELING

Minimum Credits: 3
Maximum Credits: 3
This course teaches computational structural biology, simulation, and modeling, as seen through the lens of rational, computer-aided drug discovery. Topics will include protein structure and modeling, cheminformatics, virtual small-molecule screening, molecular dynamics simulations, molecular visualization, and online resources for studying proteins and molecules. A class project will allow students to apply the relevant tools and to demonstrate their acquired knowledge.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1540 and (CS 0008 or 0011); MIN GRADE 'C'

BIOSC 1545 - THE MATHEMATICS OF BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course uses examples from across biology to illustrate how simple mathematical models can increase our understanding of biological systems. We will focus on several foundational modeling approaches, including systems of difference equations, matrix models, probability, and statistical data analysis. Students will discover how these approaches are used, their strengths and limitations, and how they could be extended to more complex problems. Students should be prepared to use both spreadsheet programs and scripts, written in a language such as Python or R, to explore these models.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1000 or 1080 or 1250 or 1500 or 1540 or 1810 (MIN GRADE 'C') or MATH 0280

BIOSC 1550 - ECOLOGY AND EVOLUTION SEMINAR

Minimum Credits: 1
Maximum Credits: 1
In this seminar course, a single topic is developed by student presentations of research articles from the original scientific literature as chosen by the instructor. Topics might include, for example, "cladistics controversies", "molecular phylogeny", or "wetlands conservation".
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0350 or 0355 or BIOL 0350 or 0203) and (BIOSC 0370 or 0371 or BIOL 1430 or 1515) and BIOSC 1130; (ALL MIN GRADE 'C') PLAN: Ecology and Evolution (BS)
Course Attributes: Capstone Course

BIOSC 1551 - ECOLOGY AND EVOLUTION SEMINAR WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is a writing practicum for the ecology and evolution seminar. Students will write one paper, with several revisions, based on the topic of their oral presentation in the co-requisite course BIOSC 1550. Topics will be chosen by the instructor for BIOSC 1550.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1550 (MIN GRADE 'C'); PLAN: Ecology and Evolution (BS)
Course Attributes: Capstone Course, Writing Requirement Course

BIOSC 1560 - CELL AND DEVELOPMENTAL BIOLOGY SEMINAR

Minimum Credits: 1
Maximum Credits: 1
In this seminar course, a single topic each term is developed by student presentations of research articles from the original scientific literature, as chosen by the instructor. Possible topics might include genes encoding major developmental switch proteins, the cytoskeletal basis of morphological movements in development, or establishing and subdividing body axes in development.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1500 (MIN GRADE 'C'); CREQ: BIOSC 1520 (MIN GRADE 'C'): PLAN: Molecular Biology (BS)

BIOSC 1561 - CELL DEVELOPMENTAL BIOLOGY SEMINAR WRITNG PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is a writing practicum for the cell and developmental biology seminar. Topics will be chosen by the instructor for BIOSC 1560.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1560 (MIN GRADE 'C'); PLAN: Molecular Biology (BS)
Course Attributes: Capstone Course, Writing Requirement Course

BIOSC 1570 - MICROBIOLOGY SEMINAR

Minimum Credits: 1
Maximum Credits: 1
In this seminar course, a single topic each term will be chosen in which the instructor is experienced and knowledgeable, and in which a suitable collection of primary research articles is available for student presentation. The papers to be discussed will be drawn primarily from the recent literature, and will reflect current concepts in microbiology.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1865 (MIN GRADE 'C'); PLAN: Microbiology (BS)
Course Attributes: Capstone Course

BIOSC 1571 - MICROBIOLOGY SEMINAR WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is a writing practicum for the microbiology seminar. Topics will be chosen by the instructor for BIOSC 1570.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1570 (MIN GRADE 'C'); PLAN: Microbiology (BS)
Course Attributes: Capstone Course, Writing Requirement Course

BIOSC 1580 - BIOCHEMISTRY SEMINAR

Minimum Credits: 1
Maximum Credits: 1
In this seminar course, a single topic each term is developed by student presentations of research articles from the original scientific literature, as chosen by the instructor. Recent topics have included biosynthesis of peptide hormones, recombinant DNA technology, processing of mRNA precursors, protein folding with emphasis on the molecular biology and biochemistry of chaperonins, and protein translocation within cells.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1820 (MIN GRADE 'C'); PLAN: Molecular Biology (BS)

BIOSC 1581 - BIOCHEMISTRY SEMINAR WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is a writing practicum for the biochemistry seminar. Topics will be chosen by the instructor for BIOSC 1580.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1580 (MIN GRADE 'C'); PLAN: Molecular Biology (BS)
Course Attributes: Capstone Course, Writing Requirement Course

BIOSC 1590 - SPECIAL TOPICS IN BIOLOGICAL SCIENCE

Minimum Credits: 1
Maximum Credits: 3
A single major topic in biology will be developed and explored by students in the form of student presentations of current and/or historical literature.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0350 or 0355 or BIOL 0203 or 0350 (MIN GRADE 'C'); MIN CUM GPA: 3.25

BIOSC 1610 - CONSERVATION BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This field course will focus primarily on the applied aspects of conservation biology by examining the degradation and loss of species populations and ecosystems due to human activities and by considering alternatives for avoiding and/or mitigating these impacts. The perspectives of science, management, and policy will be elucidated in the context of historical, current, and future strategies designed to conserve the diversity of life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716) or (BIOL 0102 or 0120) (MIN GRADE 'C')

BIOSC 1630 - COMPUTATIONAL BIOLOGY SEMINAR

Minimum Credits: 2
Maximum Credits: 2
Topics in computational biology will be explored using primary literature. Students will present research articles orally, as well as complete a series of writing assignments that will culminate in the production of a literature review paper.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1540 (minimum grade of 'C') and (ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); LEVEL: Junior or Senior; PLAN: CBUAS-BS and CBUSCI-BS

BIOSC 1640 - COMPUTATIONAL BIOLOGY RESEARCH

Minimum Credits: 3
Maximum Credits: 3
This course will use computational biology methods to address an authentic research question.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: BIOSC 1540 or CS 1501 (MIN GRADE 'C'); PLAN: Bioinformatics
Course Attributes: Capstone Course

BIOSC 1690 - EXPERIENCE IN UNDERGRADUATE TEACHING

Minimum Credits: 0
Maximum Credits: 6
A program to allow qualified juniors and seniors to assist in the teaching of one of the biological sciences lecture or laboratory courses. Details of the student's responsibility must be worked out with the biological sciences faculty member in whose course the student will be assisting.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

BIOSC 1691 - UNDERGRADUATE TA TRAINING IN THE BIOLOGICAL SCIENCES

Minimum Credits: 1
Maximum Credits: 1
This course trains Undergraduate Teaching Assistants in skills for successful teaching practices. The course may be taken either prior to becoming a UTA or simultaneously with BIOSC 1690 Experience in Undergraduate Teaching.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

BIOSC 1730 - VIROLOGY

Minimum Credits: 3
Maximum Credits: 3
This course presents the concepts and methods of modern molecular virology. Principles of bacteriophage and animal virus replication are covered. Particular emphasis is placed on the use of viruses as model systems to approach basic problems in molecular biology. Applications of virological knowledge to medicine and biotechnology will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0350 or 0355 OR BIOL 0203) and (BIOSC 1000 and 1850) (MIN GRADE 'C')

BIOSC 1740 - VIROLOGY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
THIS COURSE IS DESIGNED TO GIVE EACH STUDENT PRACTICAL EXPERIENCE WITH THE METHODS AND TECHNIQUES USED IN THE STUDY OF VIRUSES WHILE CONDUCTING ORIGINAL RESEARCH USING BACTERIOPHAGES.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 1855 or 1860) and (BIOSC 0350 or 0355 or BIOL 0203 or 0350); MIN GRADE 'C' for all courses

BIOSC 1741 - VIROLOGY LABORATORY WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Course is a writing practicum for virology laboratory, BIOSC 1740. Students will prepare laboratory reports and write essays based on exercises and assignments for the companion course, BIOSC 1740.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1740(MIN GRADE 'C')
Course Attributes: Writing Requirement Course

BIOSC 1760 - IMMUNOLOGY

Minimum Credits: 3
Maximum Credits: 3
Course will describe the role of the immune system invertebrates. The molecular and cellular basis of immunity will be emphasized. The roles of antigens, antibodies and immunocompetent cells in pathogenesis and immunity will be covered. The applications of immunology in the design of vaccines, immunotherapeutic, immunodiagnostics, organ transplantation, cancer therapy, and immune system diseases will be discussed, as will the use of immunology in biological research.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0350 or 0355 or BIOL 0350 or 0203 (MIN GRADE 'C')

BIOSC 1810 - MACROMOLECULAR STRUCTURE AND FUNCTION

Minimum Credits: 3
Maximum Credits: 3
This course is concerned primarily with the structure and functions of proteins and nucleic acids. These are large polymers where structure and function are determined by the sequence of monomeric units. Topics will include the physical and chemical properties of the monomer units (amino acids/nucleotides); the determination of the linear sequence of these units; analyses of the three-dimensional structures of the macromolecules; kinetics and mechanisms of enzyme catalyzed reactions, including RNA enzymes; regulation of enzyme activity; molecular recognition; and fidelity of protein synthesis. Emphasis throughout will be on experimental methods, molecular mechanisms and problem solving.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOENG 1071 or BIOENG 1072 or BIOL 0102 or 0120) (MIN GRADE 'C') and (CHEM 0320 or 0350 or 0740 or 0208 or 0232)

BIOSC 1820 - METABOLIC PATHWAYS AND REGULATION

Minimum Credits: 3
Maximum Credits: 3
The primary focus of this course will be on the pathways of intermediary metabolism by which all cells and organisms synthesize and degrade carbohydrates, lipids (fats), nitrogenous compounds, and nucleotides. Specifically, we will examine the chemistry of the reactions that constitute these pathways, and discuss how energy is derived from the breakdown of nutrients. A strong emphasis will be placed on how the pathways are regulated by specific molecules and hormones in living systems. Finally, we will consider how several human diseases arise from defects in metabolic pathways, and will review papers in the current scientific literature on new techniques by which the components of metabolic pathways are characterized in the laboratory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1810 (MIN GRADE 'C')

BIOSC 1830 - BIOCHEMISTRY LABORATORY

Minimum Credits: 2
Maximum Credits: 2
Course introduces several basic experimental techniques of biochemistry including spectrophotometry, ion-exchange and gel-permeation chromatography, radio-chemical methods, gel electrophoresis, enzyme isolation, and nucleic acid purification. Lecture will concern the techniques under study.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121) and BIOSC 1810 (MIN GRADE 'C'); CREQ: BIOSC 1820 (MIN GRADE 'C'); PLAN: Molecular Biology Majors (MOLBIO-BS)

BIOSC 1831 - BIOCHEMISTRY LABORATORY WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Course is a writing practicum for biochemistry laboratory, BIOSC 1830. Students will prepare laboratory reports and write essays based on exercises and assignments for the companion course, BIOSC 1830.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1830 (MIN GRADE 'C'); PLAN; Molecular Biology (BS)
Course Attributes: Writing Requirement Course

BIOSC 1850 - MICROBIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the basic biology, diversity in types, and survival strategies of microorganisms. We will study basic topics, including microbial growth, metabolism, nutrition and genetics, as well as the relevance of microorganisms to human disease, biotechnology and environmental science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOENG 1071 or 1072 or BIOL 0102 or 0120) and (CHEM 0120 or 0102 or 0112 or 0420 or 0720 or 0770 or 0970);Min Grade 'C' for these courses

BIOSC 1855 - INTRODUCTION TO MICROBIOLOGY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Students in this course will culture microorganisms from natural samples such as soil, vegetables, and their own skin, and learn various methods in

the process of studying the organisms they have cultured. The topics for the course include (a) survey types of microorganisms, including bacteria, fungi, protozoa, algae, and bacterial viruses, (b) types of methods used to culture and study these microorganisms, (c) some practical applications of microbiology such as microbiological analysis of wastewater, and identification of clinical isolates.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121 (MIN GRADE 'C'); CREQ: BIOSC 1850 (MIN GRADE 'C')

BIOSC 1860 - MICROBIOLOGY LABORATORY

Minimum Credits: 2
Maximum Credits: 2
This laboratory course introduces basic techniques used for isolation of microorganisms in pure culture, identification of groups of microorganisms, and study of microbial physiology, genetics, and ecology. Some topics in applied microbiology that are covered include food microbiology, water and waste water analysis, and identification and antibiotic sensitivity-testing of pathogenic isolates. Viruses, archaebacterial, bacteria, algae, protozoa, and fungi that students isolate from soil, pond water, human skin, and other sources are used to illustrate these methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121) (MIN GRADE 'C'); CREQ: BIOSC 1850 (MIN GRADE 'C'); PLAN: Microbiology (BS)

BIOSC 1861 - MICROBIOLOGY LABORATORY WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Course is a writing practicum for microbiology laboratory, BIOSC 1860. Students will prepare laboratory reports and write essays based on exercises and assignments for the companion course, BIOSC 1860.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1860 (MIN GRADE 'C'); PLAN: Microbiology (BS)
Course Attributes: Writing Requirement Course

BIOSC 1865 - MICROBIAL PHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course examines the diversity of microbial life from a physiological point of view. We will examine the fundamental processes of microbial metabolism in diverse organisms, and develop a framework for understanding how organisms use different approaches to solve specific needs. Lecture material is appropriate for students trained in introductory microbiology and in biochemistry.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1850 and (BIOSC 1000 or 1810); Minimum Grade 'C'

BIOSC 1870 - ANIMAL PHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Course is a survey of the current state of our knowledge of how animals work. The emphasis will be on physiological mechanisms for survival in natural environments. A comparative approach will stress the diversity of physiological adaptations throughout the animal kingdom. Topics include nutrition, metabolism, muscle, respiration, circulation, osmoregulation, sensory and neural physiology, and hormones. The material will stress multi-cellular systems of organization at the levels of tissues, organs, and whole animals.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120 (MIN GRADE 'C')

BIOSC 1900 - BIOLOGICAL SCIENCES PEER ADVISING

Minimum Credits: 1
Maximum Credits: 1
Students in the Department of Biological Sciences will be trained as Peer Advisors who are able to share their experiences and offer appropriate advice on scheduling, studying, and extracurricular activities. Peer Advisors will meet with current and prospective BIOSC majors to help with course requirements, career preparation, and work-life balance while also helping to develop a stronger sense of community within our large department. Students must have permission from the Biological Sciences Advising Office to enroll. This course does not satisfy elective credits towards majors within the Department of Biological Sciences.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

BIOSC 1901 - INDEPENDENT STUDY

Minimum Credits: 0.5
Maximum Credits: 6
A program of independent reading with individual tutorials on a topic chosen in consultation with the BIOSC faculty member who will supervise the program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120
Course Attributes: Capstone Course

BIOSC 1903 - UNDERGRADUATE RESEARCH

Minimum Credits: 0.5
Maximum Credits: 6
A program of independent laboratory research, with supporting library work, on a topic chosen in consultation with the BIOSC faculty member who will supervise the work.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

BIOSC 1904 - UNDERGRADUATE HONORS RESEARCH

Minimum Credits: 0.5
Maximum Credits: 6
A program of independent laboratory and library research on topic chosen in consultation with the BIOSC faculty member who will supervise the work.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: [(BIOSC 0060 or 0067 or 0068 or 0080 or BIOL 0121) and (BIOSC 0160 or 0716 or 0180 or BIOL 0120)] or BIOSC 0191 or BIOL 0102 (MIN GRADE 'C')
Course Attributes: Capstone Course

BIOSC 1905 - HONORS RESEARCH WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

BIOSC 1906 - RESEARCH COMMUNICATION: COMMUNICATION IN LIFE SCIENCES RESEARCH

Minimum Credits: 1
Maximum Credits: 1

This course introduces students to a variety of topics associated with the written, oral, and pictorial communication of scientific hypotheses, data, and results, using personal research experiences of students in the course. Students will read scientific literature, discuss how to present data and models, and complete diverse assignments. Techniques to model presentations for different audiences will be emphasized. It is recommended that students work in a research lab while taking the course. The course is for students enrolled in the research certificate in biological and biomedical sciences.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

BIOSC 1907 - RESEARCH DECONSTRUCTION: UNDER THE HOOD OF LIFE SCIENCES RESEARCH

Minimum Credits: 1
Maximum Credits: 1
This course takes an in depth look into how scientific research is done by studying where research is done, who does it, how questions are developed, how approaches and techniques are chosen, and how data is analyzed and presented. Students listen to a research seminar aimed at an expert audience, and then dissect the work throughout the semester. At the end of term, pieces from studying the research project are reassembled, a video of the seminar critiqued, and the course concludes with a Q+A session with the seminar speaker. The course is for students enrolled in the research certificate in biological and biomedical sciences.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: BIOSC 0160 or 0180 or 0191 or 0716 or BIOL 0102 or 0120 (MIN GRADE 'C'); CREQ: BIOSC 1903 or 1904 or NROSCI 1901 or 1961 (MIN GRADE 'C')

BIOSC 1908 - BIOLOGY ACADEMIC COMMUNITY SEMINAR

Minimum Credits: 1
Maximum Credits: 1
Students will be introduced to a broad range of careers in this academic community seminar course, which will include a career series with invited guest speakers from the community and workshops dedicated to researching career options and job searches. Students will prepare documents (CV, cover letter, secure letters of recommendation) for their career applications. This course is restricted to students who have applied and been selected to participate in a biology career exploration academic. This course does not satisfy elective credits towards majors within the department of biological sciences.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

BIOSC 1940 - MOLECULAR BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Course will examine the molecular basis of life processes, with a primary emphasis on genes (what they are, what they do, how they determine the properties of an organism). Topics covered will include replication of DNA, transcription of DNA into rna, and translation of RNA into protein. Much of the course will be concerned with how these processes are regulated in response to changes in the environment, and how this regulation relates to the observed properties and behavior of the organism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0350 or 0355 or BIOL 0350 or 0203) and (BIOSC 1000 or 1810) (MIN GRADE 'C')

BIOSC 1950 - MOLECULAR GENETICS LABORATORY

Minimum Credits: 2
Maximum Credits: 2
This course will discuss the theories and methodologies that have recently emerged as the central theme of modern molecular genetics. Lectures will emphasize descriptions and applications of techniques such as molecular cloning, restriction site mapping, in vitro mutagenesis, the polymerase chain reaction and DNA sequence analysis that have led to the recent explosion in knowledge about chromosome organization, gene structure, and the regulation of gene expression. Laboratory sessions will emphasize polymerase chain reaction, agarose gel electrophoresis, cloning DNA fragments, bacterial transformation, restriction analysis, and the sanger method of sequencing DNA.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 0060 or 0067 or 0068 or 0191 or 0080 or BIOL 0102 or 0121 (MIN GRADE 'C'); CREQ: BIOSC 1940 (MIN GRADE 'C')

BIOSC 1951 - MOLECULAR GENETICS LABORATORY WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Course is a writing practicum for molecular genetics laboratory, BIOSC 1950. Students will prepare laboratory reports and write essays based on exercises and assignments for the companion course, BIOSC 1950.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: BIOSC 1950 (MIN GRADE 'C'); PLAN: Molecular Biology (BS)
Course Attributes: Writing Requirement Course

BIOSC 1999 - MEDICAL MICROBIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This is an advanced level lecture course educating students in the microbial aspects of human infectious diseases. Students will learn about the microbial basis of infection, the host response, and the nature of specific infections within the human body. The course also will present approaches for the diagnosis of infections and strategies for disease control. The topics of medical microbiology will be presented in a system-based rather than an organism-based approach.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BIOSC 1850 (MIN GRADE 'C')

Biological Statistics

BIOST 1200 - INTRODUCTION TO BIOSTATISTICAL REASONING

Minimum Credits: 3
Maximum Credits: 3
This SIBS Pittsburgh program is an introduction to the most commonly used statistical tools in 2-sample comparative studies in medicine and public health, with an emphasis on applications in epidemiology and human genetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BIOST 1201 - SEMINAR IN BIOSTATISTICAL COLLABORATION

Minimum Credits: 1
Maximum Credits: 1
The SIBS Pittsburgh program is developed around the collaborative research of the participating faculty and is organized into three components. The seminar component is a paired set of presentations, an overview lecture on a general area and the presentation of a specific study/data set. The journal club component will involve reading and discussion of papers. In the independent study component small groups of students will meet with a study team and develop a small data analysis project.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

BIOST 2011 - PRINCIPLES OF STATISTICAL REASONING

Minimum Credits: 3
Maximum Credits: 3
Acquaints students with the concepts of statistical reasoning as applied to the study of public health problems. Students learn the general principles of statistical analysis and acquire the ability to utilize a statistical software package (Minitab) as a tool to facilitate the processing, editing, storing, displaying, analysis and interpretation of health research related data.
Academic Career: GRAD
Course Component: Lecture
Grade Component: GradLG/SU3

Course Requirements: PROG: Graduate School of Public Health; PLAN: Excluded Plans = Biostatistics(DPH, PHD, MPH, MS, MSH)

BIOST 2012 - BAYESIAN & EMPIRICAL BAYES STAT

Minimum Credits: 3
Maximum Credits: 3
THE THEORETICAL FOUNDATIONS OF BAYESIAN AND EMPIRICAL BAYES STATISTICAL METHODS WILL BE PRESENTED. THE USE OF THESE METHODS IN DATA ANALYSIS WILL BE ILLUSTRATED WITH SPECIFIC EXAMPLES AND WITH DISCUSSIONS OF COMMON DATA ANALYSIS ISSUES CONTRASTS AND SIMILARITIES BETWEEN BAYESIAN, EMPIRICAL BAYESIAN, AND CLASSICAL METHODS WILL BE EVALUATED.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade

BIOST 2041 - INTRODUCTION TO STATISTICAL METHODS 1

Minimum Credits: 3
Maximum Credits: 3
Discusses techniques for the application of statistical theory to actual data. Topics include probability theory, estimation of parameters, and tests of hypothesis for both the discrete and continuous case.
Academic Career: GRAD
Course Component: Lecture
Grade Component: GradLG/SU3

Business

BUS 0005 - ENTREPRENEURSHIP, SMALL BUSINESS, & ECONOMIC DEVELOPMENT: ANALYSIS BETWEEN EUROPE & THE U.S.

Minimum Credits: 3
Maximum Credits: 3
This course analyses the way in which entrepreneurship and small business assist economic development. It focuses on the interrelationships between these two basic constitutive terms of the development process, and how they shape the process when they overlap. A comparative analysis of the main features of the entrepreneurial process and the development of the small business sector in Europe and the U.S. will be the core of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUS 0010 - YOUR ACADEMIC AND CAREER SUCCESS

Minimum Credits: 1
Maximum Credits: 1
In this course, you will: learn the technical aspects (academic and experiential attributes) pertaining to the majors and certificates offered in CBA; Explore paths of self-awareness and career opportunity utilizing assessment models including StrengthsFinder; Utilize Bloomberg Business Week to develop business literacy; explore global opportunities, such as study abroad, and the international internship program; develop networking skills, and relate those skills to establishing your personal and professional network; create a resume that has been reviewed by a professional development consultant; establish a CBA Connect account on which you will post your resume, schedule appointments with CLDC staff, register for events, view internship/job opportunities, and access secure documents; establish a professional profile on social media; and explore basic competency of Excel.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: PROG: College of Business Admin

BUS 0020 - YOUR CAREER SUCCESS

Minimum Credits: 1
Maximum Credits: 1
In this course, you will: learn and practice a variety of tools used in the exploration of career paths (e.g., StrengthsFinder, Skill Clusters, informational interviewing, job shadowing, etc.); Explore your skills, abilities, and preferred roles and environments; develop and implement a personal strategy for career goal setting and planning; learn the internship and job search processes; learn and practice communication tools

necessary throughout the job application process (e.g., resume, cover letter, social media, networking, interviewing, and accepting job offers).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: PROG: College of Business Admin

BUS 1023 - GLOBAL PERSPECTIVES

Minimum Credits: 1
Maximum Credits: 1
This one-credit, one-week international experience is for students who wish to gain valuable experience and exposure to several business sectors and firms within the visited country. The purpose of experience is to focus on four industry-specific business sectors relevant to the historical, cultural, political, and economic background of the country. The sectors will be chosen from the following: healthcare, tourism/hospitality, arts, sports/athletics, human/social services, education, real estate, and banking. As a result of the experience, students will develop a "tool kit" of concepts and information regarding the cultural and business climate of the country in focus, begin developing of a working knowledge of how differences in cultural context affect business activities and develop a basis for critical evaluation of a country- specific, cross-sector business analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUS 1027 - DOING BUSINESS IN ASIA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUS 1028 - DOING BUSINESS IN JAPAN

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide a broad introduction to business in Japan. Topics covered include: the Japanese economy, from post-war growth, through the 'bubble' and post-'bubble' years, to today; ongoing demographic, social/cultural, and structural change; human resource and production management; women in the workforce; and working with Japanese in a business setting. By the end of the course, students will be more knowledgeable about Japan and Japanese business, and about the opportunities and challenges facing Japanese firms and individuals working in or with Japanese firms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUS 1392 - PERSONAL FINANCIAL PLANNING

Minimum Credits: 1
Maximum Credits: 1
This course deals with the basics of personal financial planning. Students will create personal financial plans based on projected horizons of 1, 3, and 5 years. The primary focus is on near term planning with emphasis on: initial savings, paying off student debt, judicious use of credit, and investing for short and long term goals. Students will prioritize and codify their plans based on personal, professional, and lifestyle objectives projected over the plans stated horizons.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

BUS 1755 - SERVICE LEARNING IN ORGANIZATIONS

Minimum Credits: 3
Maximum Credits: 3
This course is designed around an experiential learning methodology in an international context that uses an international service project for a community organization to enhance student understanding of a particular content area in leadership and ethics. Students will be challenged to immerse themselves in readings, essays, and discussions in a specific content area that will be operationalized and reviewed throughout the duration of the community service project. Students in this course are required to participate in the international service learning component of the program.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

BUS 1900 - BUSINESS INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
The business internship provides an opportunity for students to study in depth a particular area of business management in a work setting. An internship is primarily an academic experience, not a part-time or full-time job, in which students work for a firm or organization under a supervisor and faculty sponsor to achieve specific educational objectives.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: Restricted for College of Business Administration

BUS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of business problems or functions to which they have been introduced in other business courses. The course involves directed reading and research under guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Requirements: Restricted for College of Business Administration

BUS 1904 - CBA FULL-TIME CO-OP

Minimum Credits: 1
Maximum Credits: 1
CBA students who participate in a full-time career-developing internship experience as an integral part of their CBA academic program may register for this course. Students must have completed at least 60 credits, be in good academic standing, and plan to return to campus the first spring or fall term immediately following the internship term. Internships for this course are designated by the offering organization as full-time and lasting the duration of the term. Internship agreements specifying the academic work to be completed as part of the internship are required.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: Restricted for College of Business Administration

BUS 1906 - CAREER EXPLORATION INTERNSHIP

Minimum Credits: 1
Maximum Credits: 1
This internship course is designed to help students improve self-awareness of personal preferences with respect to career interests in the context of a work experience. Incorporates readings, self-assessment instruments and exercises, job analysis, journal entries and two performance appraisals. May be used for internships, summer jobs, part time jobs and full-time positions that involve work related to a possible career interest. The internship site may be located anywhere in the world.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

BUS 1910 - BUSINESS INTERNATIONAL INTERNSHIP

Minimum Credits: 3
Maximum Credits: 6
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

BUS 1915 - DIRECTED RESEARCH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

BUS 1940 - STUDY ABROAD

Minimum Credits: 1
Maximum Credits: 18
Study abroad represents credits earned in an approved study abroad program.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

BUS 1995 - STUDY ABROAD: INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
The study abroad internship provides an opportunity for students to study in depth a particular area of business management in a work setting outside of the United States. An internship is primarily an academic experience, not a part-time or full-time job, in which students work for a firm or organization under a supervisor and faculty sponsor to achieve specific educational objectives.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

BUS 1997 - STUDY ABROAD: EXCHANGE PROGRAM

Minimum Credits: 1
Maximum Credits: 18
The study abroad exchange program represents credits earned in an approved exchange agreement between the university of Pittsburgh and another educational institution.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

Business Accounting

BUSACC 0030 - FINANCIAL ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
Helps students become informed users of firms' external financial accounting reports. The basic structure and contents of such reports and the process by which they are prepared will be studied. Discussion will involve what items are included in financial accounting reports, how such items are measured, and how various economic events affect the reports. An understanding of what can be inferred from the reports about the past performance, present position, and future prospects of the firm will be developed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECON 0100 or 0102 or 0103 or 0105 or 0110 or 0115 or 0120; PROG: College of Business Administration; LVL: So, Jr, Sr

BUSACC 0040 - MANAGERIAL ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
Introduces students to the basic terminology and concepts of cost accounting, including product costing, budgetary control, responsibility accounting, and the use of cost information in resource allocation and other managerial decisions. Textbook material and various applications in actual organizations are used to engage students in applying the concepts and methods that have been developed.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 0030 or BUSERV 1920 or CDACCT 6030 or MGMT 0022 or BUS 0115 or ACCT 0201; PROG: College of Business Administration

BUSACC 1204 - INTERMEDIATE FINANCIAL REPORTING 1

Minimum Credits: 3
Maximum Credits: 3
Covers the conceptual framework of financial accounting and its influence on Generally Accepted Accounting Principles (GAAP), with special emphasis on the valuation of assets and measurement of income.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ:(BUSACC0030orBUSERV1920orCDACCT6030orMGMT0022orBUS0115or ACCT0201)and(BUSACC0040orBUSERV1925orCDACCT6040orMGMT0023or BUS1110orACCT0202);MINGRADE 'C"ForListed Courses;PLAN: Acct,Fin,Gen Mgmt,Glbl Mgmt,Mrktng,Undclrd CBA,BIS,HRM,SCM,Not Cand Pre-MACC

BUSACC 1205 - INTERMEDIATE FINANCIAL REPORTING 2

Minimum Credits: 3
Maximum Credits: 3
Topics covered include valuation of liabilities, owners' equity, cash flow statements, and disclosure outside the primary financial statements. Like intermediate financial reporting 1, this course also engages students as active participants in the learning process. Required for all accounting majors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1204; PLAN: PLAN: Accounting, FInance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared, Not Cand for degree-Pre-MACC

BUSACC 1210 - FINANCIAL STATEMENT ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Financial statement analysis focuses on the evaluation of publicly traded company financial statements and related note disclosures as well as the correlation of this historic financial performance to the company's stock prices. This course will assist students' development of a systematic approach to analyzing reported financial data and understanding the underlying risks and possible inconsistencies among comparative companies. Requirements of the course include interim exams and written and oral presentations of analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared

BUSACC 1216 - ADVANCED FINANCIAL ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
Covers topics that are of particular interest to financial report preparers and auditors. Special emphasis placed on accounting for business combinations and consolidated financial reporting. Other topics include international accounting, accounting for partnerships, and accounting by fiduciaries. Required for all accounting majors pursuing the CPA track.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared

BUSACC 1221 - STRATEGIC COST MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Topics covered include how product cost measurement affects resource allocation decisions; how to design modern cost systems; the strategic role of

cost information and the relationship between process improvement and cost reduction; performance measurement and organizational transformation for value creation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ:(BUSACC0030orBUSERV1920orCDACCT6030orMGMT0022orBUS0115or ACCT0201)and(BUSACC0040orBUSERV1925orCDACCT6040orMGMT0023or BUS1110orACCT0202);MINGRADE 'C"ForListed Courses;PLAN: Acct,Fin,Gen Mgmt,Glbl Mgmt,Mrktng,Undclrd CBA,BIS,HRM,SCM

BUSACC 1236 - ACCOUNTING INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Focuses on the design and implementation of accounting information systems and their ability to: collect data on the activities of an organization, accumulate and summarize the data, and make the information available to managers for analysis, decision-making and control.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ:(BUSACC0030orBUSERV1920orCDACCT6030orMGMT0022orBUS0115or ACCT0201)and(BUSACC0040orBUSERV1925orCDACCT6040orMGMT0023or BUS1110orACCT0202);MINGRADE 'C"ForListed Courses;PLAN: Acct,Fin,Gen Mgmt,Glbl Mgmt,Mrktng,Undclrd CBA,BIS,HRM,SCM,Not Cand Pre-MACC

BUSACC 1238 - AUDITING

Minimum Credits: 3
Maximum Credits: 3
Introduces auditing process and profession. Main topics include nature and purpose of auditing, auditing standards, professional conduct, auditor legal liability and approaches in auditing financial statements. Emphasizes a risk-based approach to selecting appropriate auditing techniques. Examines auditor's decision process relating to internal control assessment, audit decision process relating to internal control assessment, audit sampling and obtaining audit evidence about financial accounts. Examines extent of auditor's responsibility to uncover fraud.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205; CREQ: BUSACC 1236; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared, Not Cand for Degree-Pre-MACC

BUSACC 1242 - INDIVIDUAL TAX ACCOUNTING AND PLANNING

Minimum Credits: 3
Maximum Credits: 3
This course focuses on individual tax return preparation and planning. Students will learn how to calculate the taxes associated with a variety of personal, investment, property, and sole-proprietorship transactions. Concepts will be reinforced through the preparation of actual tax returns that reflect different combinations of such transactions. Students will develop tax planning skills by considering how various transactions can be restructured to minimize the current or future tax liability.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205 or CDACCT 6205; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared

BUSACC 1250 - SURVEY OF INTERNATIONAL ACCOUNTING ISSUES AND THE IASB

Minimum Credits: 3
Maximum Credits: 3
This financial accounting elective focuses on exposing students to the international accounting standards setting process and the study of the application of international accounting issues in business. Learning will take place through a mix of classroom time as well as experienced based learning opportunities, with each weekly class focused on an accounting issues and a related site visit experience with a company working on the accounting issue. Participation requires a good understanding of the accounting process and an interest in the global business environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSACC 1296 - ACCOUNTING INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The accounting internship provides business credits for project assignments that augment a professional accounting work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: BUSACC 1205; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared

BUSACC 1298 - ACCOUNTING INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of accounting issues or problems to which they have been introduced in other accounting courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared

Business Economics

BUSECN 1010 - MANAGERIAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
Primarily an applied microeconomics analysis although some applied macroeconomic analysis of relevance to the business firm may also be treated. Emphasizes the development of economic tools and concepts which can be used in the firm's management decision-making process. Builds upon the standard economic analysis of the firm which integrates a company's revenue, cost, output and pricing decisions. Marginal and incremental reasoning is stressed as an important decision making principle.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0120 or 0126 or 0136 or 0140 or 0220 or 0235) and (ECON 0100 or 0102 or 0105 or 0120) and (ECON 0103 or 0110 or 0115 or 0120); PROG: College of Business Administration

BUSECN 1508 - INTERNATIONAL ECONOMICS FOR MANAGERS

Minimum Credits: 3
Maximum Credits: 3
This course introduces the broad field of int'l econ, with emphasis on developing framework for effective management in today's global economoy. Key issues and problems are explored in areas of int'l trade, int'l investment & int'l payments, from perspective of manager of enterprises in operating in a cross-border, int'l environment. The approach will be verbal, graphical and non-technical and will draw from actual data sets and late-breaking news items from such business-oriented publications as Financial Times Economist, Wall Street Journal and New York Times.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: International Business (CPIB-CR1) or Global Management (GLMGT-BSBA)
Course Attributes: Global Studies, Russian & East European Studies, West European Studies

BUSECN 1509 - INTERNATIONAL BUSINESS AND TRADE

Minimum Credits: 3
Maximum Credits: 3
INTERNATIONAL BUSINESS AND TRADE
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Business Environment

BUSENV 0060 - MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Examines the social, political and legal interfaces between the business institution (especially the corporation) and the environment. Topics typically considered include ethical and value issues in business, the social responsibilities of business, business-government relations, and the management of stakeholder relationships and corporate social policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: College of Business Administration; LVL: So, Jr, Sr
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req.

BUSENV 0061 - CERTIFICATE PROGRAM IN LEADERSHIP AND ETHICS: MANAGERIAL ETHICS AND STAKEHOLDER MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Course examines the social, political and legal interfaces between the business institution (especially the corporation) and the environment. Topics typically considered include ethical and value issues in business, the social responsibilities of business, business-government relations, and the management of stakeholder relationships and corporate social policy. This section is reserved for students pursuing the Certificate Program in Leadership and Ethics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Leadership and Ethics (CERT)

BUSENV 1701 - ETHICAL LEADERSHIP FUNDAMENTALS

Minimum Credits: 1
Maximum Credits: 1
In this first integrated seminar of the CPLE sequence, students are introduced to ethics concepts and leadership skills - with a particular emphasis on demonstrating how ethics and leadership are complementary areas of emphasis for an effective leader. Ethics and leadership must be considered together in order to produce leaders who have the foresight to consider issues of responsibility, account ability and the full impact of their actions as well as a skill set that will empower them to implement their vision.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Leadership and Ethics (CERT)

BUSENV 1706 - MARKET MANIPULATIONS: CRISES, BUBBLES, ROBBER BARONS AND CORPORATE SAINTS

Minimum Credits: 3
Maximum Credits: 3
Taking a historical perspective, the course focuses on the major kinds of market manipulations, as well as their impacts. Major topic areas include: the nature of a market and its 'failures,' and how firms as well as governments evolved to compensate for those failures; types of major market calamities, with historical comparisons, examining how they might have been successfully managed; the market manipulators, focusing on the 'robber barons' of the 'gilded age;' and the contexts and consequences of market manipulation, including an overview of factory towns and of worker impacts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSENV 1750 - LEADERSHIP AND ETHICS INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
Students will complete both social and ethics audits of the organization for which they are working an internship assignment. These exercises are

designed to lead students to examine and critique their organization's commitment to ethics and leadership in a critical, yet balanced, manner. The content of the internship course centers around students independently recognizing & identifying how issues related to ethics & leadership are & are not addressed in the organizations that they serve. Students permitted to take any internship approved by CBA's Berg Center for Leadership and Ethics.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Leadership and Ethics(CERT)

BUSENV 1755 - SERVICE LEARNING IN ORGANIZATIONS

Minimum Credits: 3
Maximum Credits: 3
This course is designed around an experiential learning methodology that uses a service project for a community organization to enhance student understanding of a particular content area in leadership and ethics. Students will be challenged to immerse themselves in readings, essays and discussions in a specific content area that will be operationalized and reviewed throughout the duration of the community service project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Leadership and Ethics (CERT)

BUSENV 1757 - RACE AND BUSINESS ETHICS

Minimum Credits: 3
Maximum Credits: 3
In what ways are corporations responsible for alleviating racial injustice? The Race and Business Ethics course is designed to give students the confidence and ability to address pressing social issues that are affecting corporate decision-making. Corporate leaders are making heavy investments in training and leadership programming to build a deeper understanding of racial injustice with the hope of bringing about a more fair and equitable society. The pressure on leaders to envision social issues as a part of corporate strategy comes from internal and external stakeholders and is consistent with the rise of important business movements that include sustainability and corporate social responsibility. Topics addressed in the course include African-American entrepreneurship, white racial identity, theories of justice, and structural racism, among others. Course assignments include a formal debate concerning front-page issues, leading a conversation about race via social media networks, and reading-based examinations. Students who take the course will be presented with readings, speeches, films, and other media that take a scholarly approach to the issue of race and the variety of ways it continues to exert its force on culture and commerce.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSENV 1760 - BUSINESS LAW

Minimum Credits: 3
Maximum Credits: 3
Provides students with an exposure to the extensive laws and regulations that affect almost all major aspects of business operations. Topics covered are chosen on the basis of their importance to contemporary business.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSENV 1765 - LEADERSHIP IN THE SOCIAL ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
This course will give CPLE students exposure to in-depth analysis of leadership concepts and techniques in personal, interpersonal, and group skill areas. Students will complete a number of assessment and skill development exercises in topics such as teamwork, motivation, agenda building, power and influence tactics, problem solving and decision-making. The exercises will be grounded in students' real world experiences in internships, leadership roles and campus and community organizations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Leadership and Ethics (CERT)

BUSENV 1770 - BUSINESS ENVIRONMENT INDEPENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of business environment issues or problems to which they have been introduced in other business environment courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

BUSENV 1775 - CPLE CAPSTONE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
In this final course of the CPLE sequence, student will take a capstone seminar that is essentially a graduate-level research seminar on specific content areas in ethics and leadership. Based on previous exposure to the research process in the integrated seminars, students in the capstone seminar will be challenged to develop a substantial research project on their primary area of interest and expertise.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Leadership and Ethics (CERT)

BUSENV 1780 - CORPORATE GOVERNANCE

Minimum Credits: 3
Maximum Credits: 3
Corporate governance, the set of policies, process and customs by which an institution is directed, is a topic of increasing importance. How a company is governed influences corporate performance, rights and relationships with its stakeholders. This course aims to provide a deep understanding of the fundamentals of corporate governance from a variety of angles ' the board of directors, senior management, investors, media, regulators and society ' and from an international perspective. After a highlight on the main issues of corporate governance (e.g. the relationships between owners, management, board and institutional environment), relevant theories and corporate governance practices will be analyzed. Students will gain skills required for understanding corporate behavior and will be introduced to issues in business and government relations through lectures, discussion and case/policy studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSENV 1785 - SOCIAL ENTREPRENEURSHIP

Minimum Credits: 3
Maximum Credits: 3
This course covers theory, conceptual frameworks, and tools used to formulate strategies for commercializing new technologies. The analytical frameworks cover elements of commercialization strategy that are equally critical to start-ups and to corporate technology ventures. In addition, we discuss some of the key challenges that differ for start-ups versus established firms. The primary deliverable in the course is a professional quality project which evaluates the commercialization alternatives for an emerging technology. Your project team will be paired with a local inventor, unless you prefer to evaluate a technology of special interest to your team. Experienced entrepreneurs and expects in financing new technology ventures will also address the class.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSENV 1790 - BUSINESS ENVIRONMENT INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The business environment internship provides business credits for project assignments that augment a professional business environment work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

BUSENV 1791 - PROJECTS IN ENTREPRENEURSHIP

Minimum Credits: 3
Maximum Credits: 3
This project course will involve an entrepreneurial incubator called the "Blast Furnace"' during which you can learn about bringing an idea to the market and what it means to be an entrepreneur. The first part of the class will educate you on what is a good idea and what it means and takes to start a business. The second part of the course provides access to a rich curriculum, mentor and coaches and co-working space to prepare you to create and grow a business.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSENV 1795 - BUSINESS AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
The financial crisis, international negotiations toward a climate change agreement, and crises in such industries as pharmaceuticals and even toy manufacturing have highlighted the increasing interdependence of business and government. Such events often also expose the means by which business gains strategic benefits from government regulation. This course will examine methods and patterns of business influence on government, modern approaches to regulatory design, policy-making on issues affecting business, the performance of regulatory agencies, and the behaviors of groups and trade associations in politics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Business Information Systems

BUSBIS 1060 - INTRODUCTION TO INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
IT does not matter it's what you do with IT! Business in the 21st century runs on IT. However, competitive advantage seldom comes from having exclusive or proprietary access to a technology. Rather, IT comes from more effectively utilizing technologies to which everyone - including the competition - has access. The implications of this reality are many. First, it is necessary to understand what technologies are available in the marketplace and their capabilities. Next, and far more challenging, it is necessary to understand how these capabilities may positively (or negatively) interact with business strategy. Business transformation is the alignment of process, people, and technology such that IT can both support and innovate business strategies. Given that technologies evolve and develop at a rapid pace, IT is necessary for managers to understand what technologies can do (both established and new) and how IT can be leveraged to create real value.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: College of Business Admin

BUSBIS 1600 - TECHNOLOGY-ENABLED BUSINESS TRANSFORMATION

Minimum Credits: 3
Maximum Credits: 3
It does not matter it's what you do with it! Business in the 21st century runs on it. However, competitive advantage seldom comes from having exclusive or proprietary access to a technology. Rather, it comes from more effectively utilizing technologies to which everyone - including the competition - has access. The implications of this reality are many. First, it is necessary to understand what technologies are available in the marketplace and their capabilities. Next, and far more challenging, it is necessary to understand how these capabilities may positively (or negatively) interact with business strategy. Business transformation is the alignment of process, people, and technology such that it can both support and innovate business strategies. Given that technologies evolve and develop at a rapid pace, it is necessary for managers to understand what technologies can do (both established and new) and how it can be leveraged to create real value.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting(BSB),Finance(BSB),General Management(BSB),Global Management(BSBA),Marketing(BSB), Business Information Systems(BSB), Human Resources Management,Human Resources Management(BSB),Supply Chain Management(BSB) and undeclared CBA Majors

BUSBIS 1605 - DATABASE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Topics covered include development of enterprise-wide data models using entity-relationship diagrams and semantic data models, logical design and implementation of relational databases, SQL, elements of data structures, and basic issues in the management of the corporate data resource.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting(BSB),Finance(BSB),General Management(BSB),Global Management(BSBA),Marketing(BSB), Business Information Systems(BSB), Human Resources Management,Human Resources Management(BSB),Supply Chain Management(BSB) and undeclared CBA Majors

BUSBIS 1615 - BUSINESS INFORMATION SYSTEMS INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The business information systems internship provides the business credits for project assignments that augment a professional BIS work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSBIS 1620 - BUSINESS INFORMATION SYSTEMS INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of business information systems issues or problems to which they have been introduced in other business information systems courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSBIS 1625 - ELECTRONIC COMMERCE

Minimum Credits: 3
Maximum Credits: 3
This course will cover: (1) electronic business, defined as the use of internet and related communication technologies for organizational communication, coordination, and management of the firm; (2) electronic commerce, defined as the process of buying and selling goods and services electronically; and (3) societal implications of the new technologies. Students will be evaluated on the basis of class participation, assignments, quizzes, exams, and a business plan where students propose e-commerce solutions to tackle specific organizational or business problems and opportunities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting(BSB),Finance(BSB),General Management(BSB),Global Management(BSBA),Marketing(BSB), Business Information Systems(BSB), Human Resources Management,Human Resources Management(BSB),Supply Chain Management(BSB) and undeclared CBA Majors

BUSBIS 1630 - PROJECT MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Planning, organizing, staffing, and controlling projects requires traditional management skills as well as an appreciation of the tools, techniques, and practices unique to project management. This course starts with an overview of project management concepts, and then focuses on project planning, estimating, monitoring, and controlling. It also covers topics related to being an effective project leader and managing project teams. The project management institute (PMI), a professional organization for project managers, has produced a guide to the project management body of knowledge, which documents the knowledge and practices needed by today's project managers. This guide, along with current research and management trends related to project management, provide the framework for material covered in this class.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PLAN: Accounting(BSB),Finance(BSB),General Management(BSB),Global Management(BSBA),Marketing(BSB), Business Information Systems(BSB), Human Resources Management,Human Resources Management(BSB),Supply Chain Management(BSB) and undeclared CBA Majors

BUSBIS 1635 - INFORMATION TECHNOLOGY SYSTEMS IN SUPPLY CHAINS

Minimum Credits: 3
Maximum Credits: 3
This course examines the advantages and complexities of ERP software and demonstrates how the system can improve processes and streamline operations as applied toward a global supply chain. ERP systems provide a competitive advantage for a company by allowing the management of different functions and processes in one single corporate information system, providing access to real-time data within the company, enabling greater business agility and strategic decisions. Accordingly, information technology systems in supply chains has been designed to provide students with: strong knowledge of enterprise resource planning (ERP) systems and how companies leverage ERP software to manage global supply chains. Hands-on experience with the execution of supply chain business processes in sap, an industry leader in ERP business software. Practical skills, acquired through experience-based learning activities, which will make students more effective working in a collaborative, global, virtual business world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting(BSB),Finance(BSB),General Management(BSB),Global Management(BSBA),Marketing(BSB), Business Information Systems(BSB), Human Resources Management,Human Resources Management(BSB),Supply Chain Management(BSB) and undeclared CBA Majors

BUSBIS 1640 - IT ARCHITECTURE AND PLATFORMS

Minimum Credits: 3
Maximum Credits: 3
There is no such thing as a technology decision. There are only business decisions. The options and issues affecting the deployment and utilization of business information systems have grown in number and greatly increased in complexity since the internet and concomitant technologies have become the most important de-facto standards for business computing and networking. Business people who are involved in technology selection and deployment decisions need a basic knowledge of these areas as well as an understanding the value, costs and benefits they might offer to a business. They also must be able to find out about and evaluate new or emerging technologies and issues that could have relevance in their business situations. They then need to be able to explain all of this to other business people - in business terms. This course will utilize: lectures and presentations by the instructor and outside speakers to present current and relevant architectures and issues that affect businesses deploying information systems; full-length case studies and class discussion to facilitate the examination of the business implications of and the context in which these system deployment factors are involved; team projects to give the students experience in researching, understanding, evaluating and explaining information technologies and issues within a business context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared

BUSBIS 1645 - INFORMATION SYSTEMS ETHICS

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of ethics concepts and decision-making as they are related to Information Systems and Computing. Emphasis is placed on the study of ethical situations and responsibilities of IS professionals around current and emerging technologies in a global setting. Research papers, Case studies and discussion of current ethical events around technology will be used to facilitate discussions in areas including, but not limited to: Cloud Computing, Data protection, Cyber Security, The Digital Divide, Social Media, Intellectual Property, Whistleblowing, Professional Codes of Conduct, Professional liability, Internet freedom in computing and international laws and governance. Invited Subject Matter Experts will conduct informative sessions on key subject matter areas aligned with the course content.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSBIS 1650 - IS CONSULTANCY PRACTICES SOLUTION DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
In today's world, businesses rely on Information Systems (IS) to be the key enabler that supports the business processes and decision making. IS catapults businesses to the next level of growth and sustainable competitive advantage. More and more companies are either implementing brand new

IS system with cutting edge business tools and technologies, or implementing newer modules like CRM (Customer Relationship Management) or SCM(Supply Chain Management). When businesses undertake a project to implement a new IS solution, they often lack the internal knowledge, expertise and tools necessary to make it succeed. Hence comes the need to look for external expertise from IS Consultancy Firms. MCS or Management Consultancy Services is a line of business that provides consultancy services to their clients for implementation of new IS systems. The tools for business analysis required by a Business Analyst are covered in the course BISBIS 1600 - Technology Enabled Business Transformation. The tools for Project Management are covered in the course BUSBIS 1630 - Project Management. This course has these as preferably prerequisites, else co-requisites and takes the student further to learn the skillsets needed of an IS Consultant. The course begins with a brief recap of fundamental concepts covered in BISBIS 1600 and BUSBIS 1630. It then proceeds to simulate an actual real life, full cycle IS Consultancy Project. The class is divided into groups each of which represent an individual IS Consultancy Firm engaged by a client to implement a full cycle IS solution. The course takes the student through the complete life cycle of an IS Implementation as done by a Consulting Company: 1. Planning 2. Analysis 3. Design 4. Development 5. Testing 6. Deployment The instructor serves as the client and another group as the Development team. Each consulting group works towards the completion of each phase of the Consulting Project and present its deliverables, thereby working towards the final deployment. The student stands to benefit tremendously from the course as it develops all the skillset necessary for a Consultant including hard skills and soft skills. The student becomes tremendously marketable to any company, be it a consulting firm, or a regular company looking to run its own IS project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSBIS 1655 - DESIGN THINKING

Minimum Credits: 3
Maximum Credits: 3
Design thinking refers to a transformation and problem-solving approach that emphasizes strong user orientation and agile iterations with multidisciplinary teams. Aiming to create ideas and solutions that are emotionally meaningful, functional, and economically viable, "design thinking integrates the needs of people, the possibilities of technology, and the requirements for business success ." Design thinking is applicable to both start-ups and mature organizations to design new offerings or re-design existing teams, products, services, business models, or platform ecosystems. Adopting a hands-on and experience-based learning approach, this course introduces design thinking to business undergraduate students. Through lectures and case discussions students will learn about the design thinking process and the applications of design thinking for digital transformation across a variety of industries. Students will also work in teams to participate in a design challenge project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSBIS 1660 - DISRUPTIVE TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3
Disruptive technologies refer to technological advancements that overturn established business methods and practices. The diffusion of disruptive technologies in an industry prompts a new competitive race among the firms in the industry, resulting in the rise of new firms, demise of mature firms, and/or a reshuffle of leaders and laggards in the industry. In this course, we'll learn about the business and technological conditions in which disruptive innovation materializes, examine historical advancements in technologies that have disrupted industries, survey emerging technologies, such as cryptocurrencies, distributed ledgers, and robotics enabled by artificial intelligence (AI) technologies, and investigate both the designs and applications of these emerging technologies for creating business value. Through lectures, case discussions, and hands-on projects, students will develop an appreciation of the emerging disruptive technologies and their applications in business. Students will also work in teams to participate in a business plan development exercise that leverages an emerging disruptive technology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSBIS 1665 - IMPROVING THE USER EXPERIENCE

Minimum Credits: 3
Maximum Credits: 3
While many organizations have outsourced the design of production systems, there is still a need to provide high quality specifications for those systems. In addition, the Internet and e-commerce explosion of the late 1990s has created an even wider need to design corporate websites and apps. Designers and developers should take into account what we know about human factors engineering to improve the user experience (UX). This course focuses on how to gather requirements, achieve a usable first draft, and test and improve that draft. A half-dozen course projects include usability critiques, assessments of users' difficulties in understanding systems, and designs of forms, screen layouts, and icons. A running major project in four parts provides a usability critique of a website or app, followed by empirical tests of usability, followed by suggestions for improvement, and finally, empirical tests of prototype screens (using an easy tool) that would implement improvements. A final presentation is a summary of all four stages that is intended to convince management to provide funds to make the changes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSBIS 1670 - DATA WAREHOUSING

Minimum Credits: 3
Maximum Credits: 3
A data warehouse refers to an enterprise-level, centralized repository that stores current and historical data, which is used for managerial reporting and decision making. A data warehouse differs from a relational database used for facilitating transactions both in architecture and use. In this course, students will learn the architectural concepts of data warehouses such as the star schema and the processes involved in utilizing data warehouses for enterprise data management. Such processes include the extract, transform, and load (ETL) steps of populating data warehouses from disparate data sources, and online analytical processing (OLAP) for querying and managerial reporting. This course will emphasize a hands-on approach and the acquisition of the following skills: ¿ Dimensional design process for a data warehouse ¿ Executing ETL steps for data management ¿ OLAP for managerial reporting and decision-making The primary mode of learning will be through hands-on exercises and cases. A major component of the course grade stems from the course project that is done individually. Students should expect intensive out-of-class readings and practice sessions to get the most out of this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Organizational Behavior

BUSORG 1020 - ORGANIZATIONAL BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
Provides an overview of topics and concepts in the field of organizational behavior. Emphasis is on developing a theoretical grasp of issues and problems as well as an understanding of the practical implications of various theories of human behavior at work. Specific topics include leadership, motivation, teamwork, career issues, work roles, job enrichment, employee participation, and work and non-work integration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: College of Business Admin; LVL: So, Jr, Sr

BUSORG 1021 - ORGANIZATIONAL BEHAVIOR HONORS +1

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted to College of Business Admin Students Only.
Course Attributes: University Honors Course

BUSORG 1101 - FUNDAMENTALS OF BUSINESS COMMUNICTION

Minimum Credits: 3
Maximum Credits: 3
Provides conceptual foundations and training in key communication skills essential for a business professional's effectiveness. Develops skills in oral presentation, interpersonal communication, and communication in teams as applied in business settings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors ; LVL: So, Jr, Sr

BUSORG 1640 - THE ENTREPRENEURSHIP PROCESS

Minimum Credits: 3
Maximum Credits: 3
Emphasis will be placed on business principles vital to the entrepreneurship process, including idea generation, feasibility analysis, the integration of the functional areas of business (strategy, marketing, finance and accounting), building a new venture team, securing financing and protecting intellectual property. Through case studies, video clips and visiting entrepreneurs, these principles will be contextualized with real-life entrepreneurial successes and failures.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSORG 1645 - CORPORATE ENTREPRENEURSHIP

Minimum Credits: 3
Maximum Credits: 3
The course concentrates around the question: how do companies strategically manage technology & innovation? The goal is to provide theories and methodologies relevant to the management of innovation which will help achieve a sustainable competitive advantage for firms. Students will have to apply ideas, concepts, tools, and frameworks introduced in the course to real world cases. They will be challenged to develop and defend their opinions in matters that are not always straightforward.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors ; LVL: Jr or Sr

BUSORG 1650 - ISSUES IN CAREER MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Focuses on the issue of careers in organizations or the sequences of jobs and occupations that a person will hold over his or her lifetime. Examines a variety of perspectives on career management. Focuses on the individual and organizational factors in career development by addressing issues such as career planning, job choice, work socialization, career stages, mentoring and work and family concerns.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSORG 1020 (MIN GRADE 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSORG 1655 - INTERNATIONAL DIMENSIONS OF ORGANIZATIONAL BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
Provides an introduction to organizational behavior in a global context. Emphasis is on applying core organizational behavior concepts such as leadership, motivation, and group processes, as well as more contemporary topics such as cultural diversity and expatriation to workers in Europe, Asia, and the Americas. Develops an understanding of culture and cross-cultural differences and an awareness of the key skills needed to interact effectively in cross-cultural settings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSORG 1020; PLAN: International Business (CPIB-CR1) or Global Management (BSBA)
Course Attributes: Global Studies, West European Studies

BUSORG 1660 - MANAGING DIVERSTIY IN ORGANIZATIONS

Minimum Credits: 3
Maximum Credits: 3
Examines the similarities and differences in the work experiences of men and women within organizations. Also examines some of the individual and organizational consequences of gender and work. Topics include gender role attitudes, occupational segregation, gender and leadership, sexual behavior within the workplace, career mobility and workforce diversity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSORG 1020 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSORG 1665 - LAW, ENTREPRENEURSHIP, AND INNOVATION

Minimum Credits: 3
Maximum Credits: 3
This hands-on, practical course is intended to expose students to founders of innovation companies and the legal issues they face. The course will take students through the life cycle of a technology start-up company, from concept and formation to exit (IPO or sale), through careful analysis of relevant legal documents and case studies, as well as participation in lectures, workshops and simulations. The course will cover choice of entity and formation, employee hiring and compensation, evaluation and protection of intellectual property and the development of a comprehensive IP strategy, valuation and financing, licensing and sales, multinational operations, and exit strategies. The course will provide students with the legal framework and tools necessary to launch and grow a successful technology start-up.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSORG 1670 - ORGANIZATIONAL BEHAVIOR INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of organizational behavior issues or problems to which they have been introduced in other organizational behavior courses. The course involves directed reading and research under the guidance of a full time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

BUSORG 1701 - SOCIAL ENTREPRENEURSHIP

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSORG 1703 - ENTREPRENEURIAL PROCESS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Business Service

BUSERV 1365 - GLOBAL LEADERSHIP CAPSTONE

Minimum Credits: 3
Maximum Credits: 3
Global Leadership Capstone
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSERV 1370 - GLOBAL LEADERSHIP FIELD PRACTICUM

Minimum Credits: 3
Maximum Credits: 3
Global Leadership Field Practicum
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

BUSERV 1910 - INTRODUCTION TO BUSINESS

Minimum Credits: 3
Maximum Credits: 3
Provides an overview of how American business operates in our economy. Emphasis is given to the study of management, planning, personnel, finance, and marketing, and how these are interrelated within our business system. The activities in each of these functions are discussed, role of the participants analyzed, and underlying theories examined. The student should gain an insight into the primary activities in business and an understanding of their practical applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

BUSERV 1915 - INTRODUCTION TO MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Introduces the basic roles of managers such as planning, organizing, controlling, staffing, and directing. Aspects of leadership, motivation, organization structure, and the interdependence of functional subsystems will also be covered. Emphasis is placed on management practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

BUSERV 1920 - FINANCIAL ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
A study of accounting and financial concepts pertaining to the business enterprise, with emphasis on the understanding and use of accounting and financial data. This course develops the ability to analyze and interpret internal and external financial developments as they relate to a business enterprise and provides an operational knowledge of the accounting cycle.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

BUSERV 1925 - COST ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
This course has three objectives: (1) to develop an understanding of the broad range of cost accounting concepts underlying cost determination and analysis; (2) to provide familiarity with the controls that are afforded in the application of cost accounting concepts; and (3) to create an awareness of how cost accounting can contribute to decision-making and planning. These objectives are accomplished through analyses of the behavior and economic data within the firm, evaluation of actual and standard cost systems, and the examination of cost measurements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREG: BUSERV 1920; MIN GRADE 'C'

BUSERV 1940 - MARKETING FUNDAMENTALS

Minimum Credits: 3
Maximum Credits: 3
Provides an understanding of the roles of marketing in the economy and the firm, and develops a rationale for a marketing perspective as a guide to organizational and individual actions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSERV 1955 - PRINCIPLES OF SELLING

Minimum Credits: 3
Maximum Credits: 3
Examines aspects of personal selling and the links between the seller and the buyer. The establishment of rapport through the development of interpersonal skills and the translation of company or self-objectives into decisions that motivate the sales force are included. Methods of recruiting and selecting the salesperson, training the salesperson, problems of evaluation, establishing personal credibility, handling objections, closing a sale, establishing one's personal goals, and objectives and procedures for self-management are included.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSERV 1985 - SMALL BUSINESS MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Introduces basic principles and practices for successful management of a small business. Topics include the economic environment, development of personal and organization objectives, marketing production, finance, credit, accounting, business law, and records management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Career Development Accounting

CDACCT 6030 - FINANCIAL ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
Helps students become informed users of firms' external financial reports. The basic structure and contents of such reports and the process by which they are prepared will be studied. Discussion will involve what items are included in the reports, how such items are measured, and how various economic events affect them. An understanding of what can be inferred from the reports about past performance, present position, and future prospects of the firms will be developed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECON 0102 or 0103 or 0105 or 0110 or 0115 or 0120; MIN GRADE: 'C' For Listed Courses; PLAN: Accounting (CERT)

CDACCT 6040 - MANAGERIAL ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
Introduces students to the basic terminology and concepts of cost accounting, and provides an introductory coverage of product costing, cost allocation, budgetary control, responsibility accounting, and the use of cost information in resource allocation and other managerial decisions. Textbook material and real world examples are used to engage students in extensive problem solving.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 0030 or BUSERV 1920 or CDACCT 6030 or MGMT 0022 or BUS 0115 or ACCT 0201; PLAN: Accounting (CERT)

CDACCT 6204 - INTERMEDIATE FINANCIAL REPORTING 1

Minimum Credits: 3
Maximum Credits: 3
Covers the conceptual framework of financial accounting and its influence on generally accepted accounting principles (GAAP), with special emphasis on the valuation of assets, and measurement of income. Requirements include reading the original pronouncements on GAAP, making oral presentations, and writing short position papers on various accounting issues of current interest.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (BUSACC 0030 or BUSERV 1920 or CDACCT 6030 or MGMT 0022 or BUS 0115 or ACCT 0201) and (BUSACC 0040 or BUSERV 1925 or CDACCT 6040 or MGMT 0023 or BUS 1110 or ACCT 0202); MIN GRAD: 'C' For Listed Courses; PLAN: Accounting (CERT)

CDACCT 6205 - INTERMEDIATE FINANCIAL REPORTING 2

Minimum Credits: 3
Maximum Credits: 3

Topics covered include valuation of liabilities, owners equity, cash flow statements, and disclosure outside the primary financial statements. Like intermediate financial reporting 1, this course also engages students as active participants in the learning process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1204 or CDACCT 6204; PLAN: Accounting (CERT)

CDACCT 6210 - FINANCIAL STATEMENT ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Financial statement analysis focuses on the evaluation of publicly traded company financial statements and related note disclosures as well as the correlation of this historic financial performance to the company's stock prices. This course will assist students' development of a systematic approach to analyzing reported financial data and understanding the underlying risks and possible inconsistencies among comparative companies. Requirements of the course include interim exams and written and oral presentations of analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205 or CDACCT 6205; PLAN: Accounting (CERT)

CDACCT 6216 - ADVANCED FINANCIAL ACCOUNTING

Minimum Credits: 3
Maximum Credits: 3
Covers topics that are of particular interest to financial report preparers and auditors. Special emphasis placed on accounting for business combinations and consolidated financial reporting. Other topics include international accounting, accounting for partnerships, and accounting by fiduciaries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205 or CDACCT 6205; PLAN: Accounting (CERT)

CDACCT 6221 - STRATEGIC COST MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Topics covered include how product cost measurement affects resource allocation decisions; how to design modern cost systems; the strategic role of cost information and the relationship between process improvement and cost reduction; performance measurement and organizational transformation for value creation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (BUSACC 0030 or BUSERV 1920 or CDACCT 6030 or MGMT 0022 or BUS 0115 or ACCT 0201) and (BUSACC 0040 or BUSERV 1925 or CDACCT 6040 or MGMT 0023 or BUS 1110 or ACCT 0202); MIN GRAD: 'C' For Listed Courses; PLAN: Accounting (CERT)

CDACCT 6236 - ACCOUNTING INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Deals with the design and implementation of accounting information systems and their ability to collect data on the activities of the organization, to accumulate and summarize it, and to make the information available to managers for analysis, decision making, and control. Special emphasis is placed on the problems inherent to this effort.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (BUSACC 0030 or BUSERV 1920 or CDACCT 6030 or MGMT 0022 or BUS 0115 or ACCT 0201) and (BUSACC 0040 or BUSERV 1925 or CDACCT 6040 or MGMT 0023 or BUS 1110 or ACCT 0202); MIN GRAD: 'C' For Listed Courses; PLAN: Accounting (CERT)

CDACCT 6238 - AUDITING

Minimum Credits: 3
Maximum Credits: 3
Introduces the auditing process and profession. Main topics include the nature and purpose of auditing, auditing standards, professional conduct, auditor legal liability, and approaches in financial statements. Emphasizes a risk-based approach to selecting appropriate auditing techniques. Examines auditor's decision process relating to internal control assessment, audit decision process relating to internal control assessment, audit sampling, and obtaining audit evidence about financial accounts. Also examines extent of auditor's responsibility to uncover fraud.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC1205 or CDACCT 6205; CREQ: BUSACC 1236 or CDACCT 6236; PLAN: Accounting (CERT)

CDACCT 6242 - INDIVIDUAL TAX ACCOUNTING AND PLANNING

Minimum Credits: 3
Maximum Credits: 3
This course focuses on individual tax return preparation and planning. Students will learn how to calculate the taxes associated with a variety of personal, investment, property, and sole-proprietorship transactions. Concepts will be reinforced through the preparation of actual tax returns that reflect different combinations of such transactions. Students will develop tax planning skills by considering how various transactions can be restructured to minimize the current or future tax liability.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSACC 1205 or CDACCT 6205; PLAN: Accounting (CERT)

Chemical Engineering

CHE 0035 - INTRODUCTRY CHEMICAL ENGINEERING

Minimum Credits: 4
Maximum Credits: 4
The principles of conservation of mass and energy are applied to the analysis of chemical processes. Included are material balance for multiple unit processes with recycle, p-v-t properties of gases and gas-vapor mixtures, thermochemistry, combined material and energy balances, and vapor-liquid equilibrium.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: Swanson School of Engineering

CHE 0036 - CHEMCL ENGRNG THERMODYNAMICS 1

Minimum Credits: 3
Maximum Credits: 3
Development of the laws of thermodynamics using a macroscopic approach. Fundamental concepts are stressed. Emphasis is placed on chemical engineering applications in problem recitation sessions. Concepts of work, heat, internal energy, potential energy, kinetic energy, enthalpy, entropy, and free energy are developed. Thermodynamic properties and equations of state are defined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: Swanson School of Engineering

CHE 0100 - FOUNDATIONS OF CHEMICAL ENGR

Minimum Credits: 6
Maximum Credits: 6
This course combines elements of mass and energy balances, thermodynamics, separations, and product design in order to set the foundation for the remainder of the chemical engineering curriculum. This course introduces chemical engineering problem solving techniques from both a (traditional) process-centric viewpoint as well as a product centric viewpoint. The course will span from theoretical (basic thermodynamics) to applied (separations) allowing a simple route to problem-based learning of difficult theoretical concepts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Course Requirements: PREQ: (CHEM 0120 or 0420 or 0770 or 0970 or 0102 or 0112) and (MATH 0230 or 0235 or 0150 or 0231) and (PHYS 0174 or 0475 or 0150 or 0201); CREQ: CHE 0101; PROG: Swanson School of Engineering

CHE 0101 - FOUNDATIONS OF CHE LABORATORY

Minimum Credits: 1
Maximum Credits: 1
The lab course associated with CHE 0100. Experiments and lectures will reinforce the content of CHE 0100.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: CHE 0100; PROG: Swanson School of Engineering

CHE 0200 - CHEMICAL ENGINEERING THERMODYNAMICS

Minimum Credits: 6
Maximum Credits: 6
This course combines the ideas from both pure and multicomponent thermodynamics. It introduces molecular insight and the tools (including commercial software) for solving both simple and complex problems in phase and chemical equilibria. The course will have a strong focus on multiscale analysis, for example, covering intermolecular potentials (molecular-scale) to aid students in choosing equations of state for novel materials (macro-scale). Advanced topics covered include interfacial behavior, adsorption, and osmotic equilibrium.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0100 with min grade of C- and (CHEM 0120 or 0420 or 0970 or 0102 or 0112) and (MATH 0230 or 0235 or 0150 or 0231) and (PHYS 0174 or 0475 or 0150 or 0201); CREQ: CHE 0201 and 0214 ; PLAN: Chemical Engineering (CHE-BSE)

CHE 0201 - CHE THERMODYNAMICS LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Laboratory corresponding to CHE 0200.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: CHE 0200; PLAN: Chemical Engineering (CHE-BSE)

CHE 0214 - INTRODUCTION TO CHEMICAL PRODUCT DESIGN

Minimum Credits: 3
Maximum Credits: 3
Traditionally, chemical product design has focused on a set procedure for product development from conception to development and testing and finally the launching of the product. Unfortunately, this model which does not keep in mind the values or needs of the customer has resulted in a high number of failures for new product launches. What skills are thus needed in order to be entrepreneurial and succeed in the development of new chemical products within industry today? This course examines the initial stages on how to approach chemical product design from an innovation perspective complete with the provision of the necessary technical skills to get the job done while placing an emphasis on the business and entrepreneurial skills required to be successful in the chemical product design business.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CHEM 0102 or 0112 or 0120 or 0420 or 0770 or 0970) and (Math 0150 or 0230 or 0231 or 0235) and (PHYS 0150 or 0174 or 0201 or 0475); CREQ: CHE 0200; Plan: Chemical Engineering (BSE)

CHE 0300 - TRANSPORT PHENOMENA

Minimum Credits: 6
Maximum Credits: 6
Stresses analogies between the three modes of transport phenomena; momentum, mass, and heat transport. Covers from the molecular origins of transport up through continuum descriptions, as well as macroscopic balances. Reynolds and Colburn Analogies in Boundary-Layer Flow as well as direct comparison of linear transport relations, such as fluid drag and mass/heat convection will be a primary focus. Problems ranging from (traditional) packed bed reactors to micro-fluidics or micro-electromechanical systems will also be discussed.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0100 and (PHYS 0175 or 0152 or 0202 or 0476) and (MATH 0290 or 0250 or 1270); CREQ: CHE 0301; PROG: Swanson School of Engineering

CHE 0301 - TRANSPORT PHENOMENA LABORATORY

Minimum Credits: 1
Maximum Credits: 1
The lab course associated with CHE 0300. Experiments and lectures will reinforce the content of CHE 0300.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: CHE 0300; PROG: Swanson School of Engineering

CHE 0314 - TAKING PRODUCTS TO MARKET: THE NEXT STEP IN CHEMICAL PRODUCT DESIGN

Minimum Credits: 3
Maximum Credits: 3
Traditionally, chemical product design has focused on a set procedure for product development from conception to development and testing and finally the launching of the product. Unfortunately, this model which does not keep in mind the values or needs of the customer has resulted in a high number of failures for new product launches. What skills are thus needed in order to be entrepreneurial and succeed in the development of new chemical products within industry today? This course is the next step in the chemical product design sequence and focuses on chemical product design and the development of business plans.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0100 and 0214 and (PHYS 0152 or 0175 or 0202 or 0476) and (MATH 0250 or 0290 or 1270); CREQ: CHE 0300

CHE 0400 - REACTIVE PROCESS ENGINEERING

Minimum Credits: 5
Maximum Credits: 5
This course integrates reactor design, reaction kinetics, and advanced separation processes to allow the comprehensive study of systems ranging from polymerization reactors to enzyme-catalyzed metabolism to (bio-) artificial organs. Coverage includes integrating multiple topics, such as chemistry, physics, biochemistry/medicine and reactor engineering. Furthermore, it addresses all length scales from the molecular level to the reactor level to the full systems level. Both theory and experiment will be highlighted and detailed simulations will be included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CHE 0100 and 0200) and (PHYS 0175 or 0475 or 0202 or 0152) and (CHEM 0310 or 0206 or 0231) and MATH 0290; CREQ: CHE 0401; PLAN: Chemical Engineering (BSE)

CHE 0401 - REACTIVE PROCESS ENGINEERING LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Laboratory corresponding to CHE 0400.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: CHE 0400; PROG: Swanson School of Engineering

CHE 0414 - PRODUCT PROTOTYPING FOR CHEMICAL ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
In this course, students working in product teams, will learn how to translate their product ideas to tangible prototypes. Included will be modules on design of screening experiments (including equipment), use of software to aid molecular design, and creation of formulations. Ultimately student groups are expected to create a working prototype by semester's end.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0314; PLAN: Chemical Engineering (CHE-BSE)

CHE 0500 - SYSTEMS ENGINEERING 1: DYNAMICS AND MODELING

Minimum Credits: 5
Maximum Credits: 5
The dynamics and modeling class is the first of a two-part systems engineering sequence. This course covers dynamical analysis of process systems, process control fundamentals, feedback, basic process modeling, and optimization. The course covers industrial-style examples from a multi-scale perspective by incorporating molecular insight into process variable calculations and large-scale information through process simulation (computer-aided design) software.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0300 and 0400 with min grade of C-; CREQ: CHE 0501; PROG: Swanson School of Engineering
Course Attributes: Capstone Course

CHE 0501 - SYSTEMS ENGINEERING 1: DYNAMICS AND MODELING LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Laboratory experience accompanying CHE 0500. Both physical and computational experiments will be performed.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: CHE 0500; PROG: Swanson School of Engineering

CHE 0601 - SYSTEMS ENGINEERING 2: DESIGN LABORATORY

Minimum Credits: 1
Maximum Credits: 1
The lab course associated with CHE 0600. Experiments and lectures will reinforce the content of CHE 0600.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SU3 Elective Basis
Course Requirements: CREQ: CHE 0613; PROG: Swanson School of Engineering

CHE 0602 - CHEMICAL ENGINEERING SAFETY AND ETHICS

Minimum Credits: 2
Maximum Credits: 2
This class will provide the student with a thorough understanding of the fundamentals in workplace health and safety with emphasis on chemical industry applications. This will be accomplished through presentation a discussion of critical issues as well as the application of these principles to the senior design project. This course will also cover ethical situations likely to arise in the chemical plant environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: 0400; CREQ: CHE 0613; PROG: Swanson School of Engineering

CHE 0613 - SYSTEM ENGINEERING 2: PROCESS DESIGN

Minimum Credits: 5
Maximum Credits: 5
This course integrates aspects of previous chemical engineering courses into the design of a complete chemical plant including the use of computer process simulation, pinch technology, and discounted cash flow economic analysis. The detailed design of chemical engineering units/processes is carried out for all aspects of the plant.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0300 and 0400(MIN GRADE C-); PROG: Swanson School of Engineering
Course Attributes: Capstone Course

CHE 0614 - SYSTEMS ENGINEERING 2: PRODUCT DESIGN

Minimum Credits: 2
Maximum Credits: 2
This course will go through the steps to successful product design and contrast these with traditional process design methods. Good product design incorporates customer needs, manufacturing flexibility, economy, sustainability and molecular design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHE 0300 and 0400; PROG: Swanson School of Engineering

CHE 1008 - INTRODCTN TO STAGED SEPARATIONS

Minimum Credits: 3
Maximum Credits: 3
Unified treatment of separation processes which are carried out in staged equipment. Computer solutions are emphasized. Binary distillation, calculations using graphical methods, multicomponent distillation of ideal and non ideal mixtures, liquid extraction, and differential distillation are studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: Swanson School of Engineering

CHE 1017 - CHEMICAL ENERGY AND THE NATURE OF THE CHEMICAL BOND

Minimum Credits: 3
Maximum Credits: 3
An overview of energy transformations arising from chemical bonding in chemical catalysis, electrocatalysis, and combustion. Students will be introduced to qualitative quantum chemistry concepts: potential energy and kinetic energy operators, wave functions, electron correlation, and GVB diagrams for analysis of chemical bonds and molecular structures in energy transformations. Students are expected to have completed Undergraduate physical chemistry course on quantum mechanics or equivalent or have prior consent from the instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: Swanson School of Engineering

CHE 1018 - INTRODUCTION TO SURFACE ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Surface and interface engineering is critical to many important applications, e.g., coating, composite, biomedical device and membrane. With the fast growth of nanotechnology, understanding the surface properties becomes even more important since nano-sized materials, e.g., graphene, have no bulk phase but surfaces. This course combines elements of physical chemistry and materials of surface and interface in order to serve as the introduction to the surface engineering. The course spans from surface tension, capillary, superwettability to lubrication as well as 2D materials, allowing a comprehensive view to both classic surface science and cutting-edge surface technology. By the end of this class, students will understand both the fundamental principles of surface science and engineering approaches on tailor a given solid surface.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0200 or BIOENG 1210 or ENGR 0022; PLAN: Swanson School of Engineering

CHE 1085 - DEPARTMENTAL SEMINAR

Minimum Credits: 0
Maximum Credits: 0
The departmental seminars are designed to acquaint the student with aspects of engineering which are normally not encountered in classes.
Academic Career: Undergraduate
Course Component: Colloquium
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

CHE 1097 - SPECIAL PROJECT

Minimum Credits: 1
Maximum Credits: 12
Student develops an individual project under supervision of a faculty member. Project may be experimental, design and oriented, or instructional. A written report is prepared.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

CHE 1290 - DIFFERENTIAL EQUATIONS IN CHEMICAL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This class will present an introduction to ordinary differential equations, including Chemical Engineering context. Topics will include linear and nonlinear ordinary differential equations, Laplace transformation, and introduction to Fourier series. This course will balance analytical solution methods and the use of numerical solution tools (Matlab) and techniques to address a range of modeling and engineering problems arising in the context of Chemical Engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0230 OR 0235; MIN GRADE 'C'; PLAN: Chemical Engineering

CHE 1530 - BIOCHEMISTRY FOR ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
The basic principles of biochemistry are presented and discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: CHE 0100 and CHEM 0310; PLAN: Chemical Engineering (BSE)

CHE 1533 - CONTROLLED DRUG DELIVERY

Minimum Credits: 3
Maximum Credits: 3
This course will provide students with a basic understanding of the engineering of controlled drug delivery systems, which stands as a 114 billion dollar industry. To this end, we will focus on topics at the interface between engineering and medicine such as biomaterials, pharmacokinetics, polymer chemistry, reaction kinetics, and biological transport phenomena. Design of transdermal, aerosol, oral, bio-mems, gene delivery, and targeted cellular delivery, will be reviewed with emphasis being placed upon us FDA regulatory considerations and the relevant physiological milieu.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: [PREQ: CHE 0300 and 0400 and (1530 or BIOSC 1000 or CHEM 1880); LVL: Sr; PLAN: Chemical Engineering (BSE)] or [BIOENG 1220; LVL: Sr; PLAN: Bioengineering (BSE)]

CHE 1540 - PRACTICAL ELECTROCHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This graduate-level elective focuses on the practice of electrochemistry in laboratory analysis and in a wide range of technological applications. We will begin with a brief overview of the fundamentals of electrochemistry in terms of thermodynamics, kinetics, and transport processes. We will then dive immediately into practical concepts with a survey of laboratory methods and technological/industrial applications of electrochemistry.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LEVEL: Junior and Senior; PLAN: Chemical Engineering Recommended courses: Introductory Thermodynamics, Chemical Kinetics, and Electricity/Magnetism

CHE 1754 - PRINCIPLES OF POLYMER ENGINEERNG

Minimum Credits: 3
Maximum Credits: 3

This course deals with the elements of polymer science and engineering necessary for entry-level understanding of polymer technology. While the chemistry determines macromolecular microstructure, an understanding of polymer manufacture and processing requires the addition of physical chemistry and transport phenomena. The essential material covered in this class includes the elements of polymers thermodynamics, rheology, mechanical behavior, and equipment design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0200 or BIOENG 1210 or MEMS 1056; PLAN: Chemical Engineering (BSE)

CHE 1870 - SOLIDS PROCESSING AND TRANSPORT

Minimum Credits: 3
Maximum Credits: 3
Particle technology affects as much as 80% of the chemical process industry, yet is often omitted from the undergraduate curriculum of chemical engineers. This course is designed to give advanced undergraduates as well as early-term graduate students an introduction to this rich and diverse field. Topics will range from fundamentals (particle classification, properties, and flow) to applied (hopper design, mixing, etc. Industry related examples and designs with be presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: Swanson School of Engineering

CHE 1933 - ENGINEERING A CRAFT BREWERY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the science of brewing and the engineering required to design and operate a craft brewery. Students will apply concepts from mass and energy balances, fluid dynamics and heat transfer, and reaction engineering to study the unit operations required to convert grain, water, yeast, and hops into beer. Students will also develop product analysis and product design skills to justify brewing choices based upon brewing science, engineering, and economic considerations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Chemistry

CHEM 0100 - PREPARATION GENERAL CHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This course is designed for those students who intend to take chemistry 0110 and 0120, but whose science and mathematical backgrounds are judged by their advisors to be relatively weak. The course emphasizes stoichiometry (chemical calculations), chemical equations, gas laws, elementary atomic structure and periodic properties of elements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

CHEM 0110 - GENERAL CHEMISTRY 1

Minimum Credits: 4
Maximum Credits: 4
Chemistry 0110 and 0120 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize applications to industrial and environmental chemistry and biochemistry. CHEM 0110 covers stoichiometry, the properties of solids, liquids and gases, thermochemistry and the electronic structure of atoms and molecules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

CHEM 0111 - GENERAL CHEMISTRY 1

Minimum Credits: 3
Maximum Credits: 3
General chemistry 1 and 2 comprise a two-term introduction to the fundamental properties of matter. General chemistry 1 covers stoichiometry, the properties of solids, liquids and gases. Thermochemistry and the electronic structure of atoms and molecules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CHEM 0120 - GENERAL CHEMISTRY 2

Minimum Credits: 4
Maximum Credits: 4
Chemistry 0110 and 0120 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize applications to industrial and environmental chemistry and biochemistry. CHEM 0110 covers stoichiometry, the properties of solids, liquids and gases, thermochemistry and the electronic structure of atoms and molecules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CHEM 0110 or 0710 or 0760 or 0960 or 0101) or (CHEM 0410 and 0430) or (CHEM 0111 and 0113)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

CHEM 0250 - INTRODUCTION TO ANALYTICAL CHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This course is concerned with the rigorous treatment of equilibria that are of analytical importance and with an introduction into electroanalytical methods, emission and absorption spectrophotometry, and modern separation methods, particularly chromatography.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0120 or 0720 or 0770 or 0970 or 0102 or (CHEM 0112 and 0114)

CHEM 0260 - INTRODUCTION TO ANALYTICAL CHEMISTRY LAB

Minimum Credits: 1
Maximum Credits: 1
The primary objectives of this course are to introduce the student to current analytical methods and to cultivate sound experimental technique. Laboratory work includes ion exchange separations, complexometric and potentiometric acid-base titrations, and absorption spectrophotometry.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: CHEM 0250 or 0201 or 0325

CHEM 0310 - ORGANIC CHEMISTRY 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading toward end of second term, when complex molecules of biological interest are discussed. Basic goals of course are to develop appreciation and skill in methods of molecular analysis which have made organic chemistry such a powerful intellectual discipline. Course will prepare student for work in advanced topics of organic chemistry, biochemistry, chemical engineering and health related sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CHEM 0120 or 0720 or 0770 or 0970 or 0102 or CHEM 0420) or (CHEM 0112 and 0114)

CHEM 0320 - ORGANIC CHEMISTRY 2

Minimum Credits: 3
Maximum Credits: 3
An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading toward end of second term, when complex molecules of biological interest are discussed. Basic goals of course are to develop appreciation and skill in methods of molecular analysis which have made organic chemistry such a powerful intellectual discipline. Course will prepare student for work in advanced topics of organic chemistry, biochemistry, chemical engineering and health related sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0310 or 0730 or 0206 or 0231

CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1

Minimum Credits: 1
Maximum Credits: 1
Chemistry 0330 is devoted to the purification, characterization, and identification of organic molecules using the techniques of recrystallization, distillation, thin-layer, column and gas-liquid chromatography, melting point determination, and infrared and nuclear magnetic resonance spectroscopy.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0310 or 0350

CHEM 0340 - ORGANIC CHEMISTRY LABORATORY 2

Minimum Credits: 1
Maximum Credits: 1
Chemistry 0340 provides an opportunity to carryout important synthetic reactions discussed in the lecture course along with an introduction to the use of the chemical literature. Reactions are analyzed and products characterized using the skills learned in chemistry 0330.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0330 or 0207 or 0233; CREQ: CHEM 0320 or 0740 or 0208 or 0232

CHEM 0345 - ORGANIC LABORATORY

Minimum Credits: 2
Maximum Credits: 2
This single semester two-credit Organic Laboratory course will provide an introduction to modern organic laboratory techniques used routinely in both industry and academics. The lab will emphasize practical applications of the reactions covered in the Organic 1 and Organic 2 lectures. The goals of the course are to provide students with practical experience in executing and analyzing organic transformations as well as practical experience in modern laboratory techniques.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0310 or 0730 and CREQ: CHEM 0740 or 0320

CHEM 0350 - PRINCIPLES OF ORGANIC CHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
A one-semester course in organic chemistry that will introduce students to fundamental principles including molecular structure, organic reactions, and mechanisms. As rigorous as the traditional two-term organic chemistry course, topics are chosen for their relevance to students entering a biological sciences-oriented career.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [CHEM 0120 or 0720 or 0770 or 0970 or (0112 and 0114)] and BIOSC 0150

CHEM 0410 - GENERAL CHEMISTRY 1

Minimum Credits: 3
Maximum Credits: 3
See chemistry 0110. This course is for students who need to take lecture without lab.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

CHEM 0420 - GENERAL CHEMISTRY 2

Minimum Credits: 3
Maximum Credits: 3
See chemistry 0120. This course is for students who must take lecture without lab.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

CHEM 0430 - GENERAL CHEMISTRY 1 LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Laboratory that accompanies CHEM 0110.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

CHEM 0440 - GENERAL CHEMISTRY 2 LABORATORY

Minimum Credits: 1
Maximum Credits: 1
Laboratory that accompanies chemistry 0120.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

CHEM 0710 - UHC GENERAL CHEMISTRY 1

Minimum Credits: 4
Maximum Credits: 4
Chemistry 0710 and 0720 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize the fundamental principles of chemistry as exemplified by applications to industrial and environmental chemistry. Chemistry 0710 covers stoichiometry, electronic structure of atoms and molecules, periodic behavior, theories of bonding, and spectroscopy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

CHEM 0720 - UHC GENERAL CHEMISTRY 2

Minimum Credits: 4
Maximum Credits: 4
Chemistry 0710 and 0720 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize the fundamental principles of chemistry as exemplified by applications to industrial and environmental chemistry. CHEM 0720 covers the properties of solids, liquids and gases, chemical dynamics and chemical kinetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CHEM 0110 or 0710 or 0760 or 0960 or 0101) or (CHEM 0410 and 0430) or (CHEM 0111 and 0113)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

CHEM 0730 - UHC ORGANIC CHEMISTRY 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading toward end of second term, when complex molecules of biological interest are discussed. Basic goals of course are to develop appreciation and skill in methods of molecular analysis which have made organic chemistry such a powerful intellectual discipline. Course will prepare student for work in advanced topics of organic chemistry, biochemistry, chemical engineering and health related sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ:(CHEM 0120 or 0720 or 0770 or 0970 or 0420) or (CHEM 0112 and 0114)
Course Attributes: University Honors Course

CHEM 0740 - UHC ORGANIC CHEMISTRY 2

Minimum Credits: 3
Maximum Credits: 3
An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading toward end of second term, when complex molecules of biological interest are discussed. Basic goals of course are to develop appreciation and skill in methods of molecular analysis which have made organic chemistry such a powerful intellectual discipline. Course will prepare student for work in advanced topics of organic chemistry, biochemistry, chemical engineering and health related sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0310 or 0730 or 0206 or 0231
Course Attributes: University Honors Course

CHEM 0745 - ORGANIC LABORATORY: ANTIBIOTIC DISCOVERY

Minimum Credits: 2
Maximum Credits: 2
The two-credit CURE Organic Chemistry Laboratory Course serves as an alternative to the Organic Chemistry Laboratory Course (CHEM 0345). This research-based laboratory course has been developed as part of an integrated 2-semester sequence in collaboration with the Department of Biological Sciences. One major goal of this course is to offer undergraduate students an opportunity to perform authentic scientific research in the laboratory course. This collaborative course sequence engages the students in learning approaches towards antibiotic discovery in order to address the world's current antibiotic crisis. Students start out in the biology course by isolating bacterial strains that display antibiotic activity. This biology course is followed up with the organic chemistry lab course that affords the students the opportunity to develop strategies for antibiotic isolation and purification using chemical separation techniques, and to characterize these unknown antibiotics through spectroscopic techniques commonly used in organic chemistry. Students are encouraged to take the biology Small World course (BIOSC 0067) prior to this CURE Organic Chemistry Lab course. However, the Small World course is not required for the students to enroll in this course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0310 or 0730; CREQ: CHEM 0320 or 0740 or 0208 or 0232

CHEM 0755 - ORGANIC CHEMISTRY LAB: RESEARCH EXPLORATION

Minimum Credits: 2
Maximum Credits: 2
In this course students will work in teams to write original research proposals. They will then design and carry out appropriate experiments, collect and interpret data and ultimately report results in both oral and written formats.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

CHEM 0760 - UHC GENERAL CHEMISTRY FOR ENGINEERS 1

Minimum Credits: 3
Maximum Credits: 3
Chemistry 0760 and 0770 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize the fundamental principles of chemistry as exemplified by applications to industrial and environmental chemistry. Chemistry 0760 covers stoichiometry, electronic

structure of atoms and molecules, periodic behavior, theories of bonding, and spectroscopy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

CHEM 0780 - UHC GENERAL CHEMISTRY FOR ENGINEERS 2

Minimum Credits: 3
Maximum Credits: 3
Chemistry 0710 and 0780 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize the fundamental principles of chemistry as exemplified by applications to industrial and environmental chemistry. CHEM 0780 covers the properties of solids, liquids and gases, chemical dynamics and chemical kinetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CHEM 0110 or 0710 or 0760 or 0960 or 0101) or (CHEM 0410 and 0430) or (CHEM 0111 and 0113)

CHEM 0910 - CHEMICAL PRINCPL HEALTH PROFESSN

Minimum Credits: 4
Maximum Credits: 4
This is a one term course covering general and biological chemistry designed primarily for students enrolled in the school of nursing or preparing for health related professions. The course covers aspects of general chemistry including atomic structure and bonding and equilibria. A brief introduction to organic chemistry including physical properties and representative reactions of common functional groups and finally the chemistry of the major classes biomolecules and metabolism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: School of Nursing students only.
Course Attributes: DSAS Natural Science General Ed. Requirement

CHEM 0960 - GENERAL CHEM FOR ENGINEERS 1

Minimum Credits: 3
Maximum Credits: 3
Essentially the same as CHEM 0110, but a total of 3 credits only and has no lab. Enrollment limited to school of engineering students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

CHEM 0970 - GENERAL CHEM FOR ENGINEERS 2

Minimum Credits: 3
Maximum Credits: 3
Essentially the same as CHEM 0120, but a total of 3 credits only. Has lab, but only two lectures per week in contrast to CHEM 0120, which has 3. Enrollment limited to school of engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0110 or 0410 or 0710 or 0760 or 0960 or 0101 or (CHEM 0111 and 0113)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

CHEM 1000 - MATHEMATICS FOR CHEMISTRY

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: MATH 0230

CHEM 1010 - SAFETY IN THE CHEMISTRY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This course will introduce students to currently accepted best practices in chemistry laboratory safety. It will do this via weekly sessions given by both academic and industrial leaders in the field. Hands on activities and discussions on topics such as hazard recognition, risk assessment, accident analysis and prevention, and emergency responses will be presented. When possible, the chemical basis of safety will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CHEM 1020 - READING THE CHEMICAL LITERATURE

Minimum Credits: 2
Maximum Credits: 2
This course will provide an introduction to understanding the assembly and function of macromolecules and supramolecular assemblies. The course will emphasize literature readings and team activities that require students to integrate concepts from their core chemistry courses. The goals of this course are to provide practical experience (1) in applying concepts from core chemistry courses to understanding complex supramolecular assemblies and (2) in reading the chemical literature. The Learning Objectives include: (1) Develop the ability to recognize and apply the basic principles learned in physical, organic, and general (inorganic) chemistry to understanding the structural and dynamical properties of macromolecules and supramolecular assemblies. (2) Develop the skills needed to design experimental probes of these processes in complex systems. (3) Learn to leverage the expertise of diverse teams to collectively tackle challenging problems. (4) Learn to construct meaningful hypotheses concerning function in complex systems. (4) Learn to design experiments and computations to test critical hypotheses. (5) Develop intuition about the importance of different molecular timescales and the driving forces for arranging molecules into functional machinery.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHEM 1130 - INORGANIC CHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
Modern bonding theories are developed to the level that permits some understanding of the effects of structure and bonding on chemical properties. Periodic relationships are discussed and applied to selected families of elements. Emphasis is placed on those aspects of structure, bonding and periodic relationships that are helpful in unifying a large body of chemical knowledge. Selected topics of current interest in inorganic chemistry are discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 1410 or 1301 or 1341
Course Attributes: Capstone Course

CHEM 1140 - ADVANCED INORGANIC LABORATORY

Minimum Credits: 2
Maximum Credits: 2
Introduces practical techniques for the synthesis and characterization of inorganic and organometallic complexes and materials. Special emphasis on the preparation and characterization of air- and water-sensitive compounds.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: CHEM 1130 or 1131 or 1401

CHEM 1250 - INSTRUMENTAL ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
The basic principles and instrumentation of important methods and their application to analysis and research problems. The coverage includes spectroscopic and electrochemical methods and chromatography. Equilibrium and dynamic aspects of each are considered.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0250 or 0201 or 0325

CHEM 1255 - INSTRUMENTAL ANALYSIS LAB

Minimum Credits: 1
Maximum Credits: 1
The laboratory component of CHEM 1250. Students will be introduced to state of the art instrumentation being used in contemporary analytical chemistry.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0260; CREQ: CHEM 1250

CHEM 1260 - INTERMEDIATE ANALYTICAL CHEMISTRY

Minimum Credits: 2
Maximum Credits: 2
This course is about becoming a professional. Students read the current scientific literature on a topic of current interest in analytical chemistry or a related area (spectroscopy, separations, electrochemistry, sensors...). They teach the class about a scientific area, and the class will discuss this area. Finally, we will attend public scientific lectures of famous scientists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 1250 or 1305 or 1327

CHEM 1281 - INSTRUMENTAL ANAL WRITING PRACT

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

CHEM 1310 - SYNTHETIC ORGANIC CHEMISTRY

Minimum Credits: 2
Maximum Credits: 2
This advanced undergraduate course builds onto sophomore organic I and II courses by applying the learned principles to the synthesis of FDA-approved drug molecules. The emphasis of the course will be on analyzing the molecular structures of drugs in a retrosynthetic fashion, followed by developing suitable synthetic routes to these molecules. The reaction mechanisms of key steps of theses syntheses will be discussed in detail. Further discussion will include fundamental functional group interconversions, chemoselectivity, and protecting group use, enantioselective synthesis, and organometallic chemistry. Students will learn about the complexities of modern drug molecules, how their structures can be analyzed, and how they are synthesized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0320 or 0740 or 0232 or CHEM 0208

CHEM 1380 - TECHNIQUES OF ORGANIC RESEARCH

Minimum Credits: 2
Maximum Credits: 2
A course which serves as a guide to the interpretation of ultraviolet, infrared, nuclear magnetic resonance and mass spectra of organic compounds.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0320 or 0740 or 0208 or 0232

CHEM 1410 - PHYSICAL CHEMISTRY 1

Minimum Credits: 3
Maximum Credits: 3
Basic lecture course dealing with quantum theory, atomic and molecular structure, symmetry, spectroscopy and diffraction methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [CHEM 0120 or 0720 or 0770 or 0970 or (0112 and 0114)] and (PHYS 0175 or 0111 or 0476) and (MATH 0240 or 0201 or 0241 or CHEM 1000)

CHEM 1420 - PHYSICAL CHEMISTRY 2

Minimum Credits: 3
Maximum Credits: 3
Basic lecture course dealing with gases, kinetic theory, chemical thermodynamics, equilibria, and chemical kinetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 1410 or 1302 or 1342
Course Attributes: Capstone Course

CHEM 1430 - PHYSICAL CHEMISTRY LABORATORY 1

Minimum Credits: 1
Maximum Credits: 1
Approximately 8 experiments are performed during the term. Experiments are selected to illustrate important principles of physical chemistry and to make the student familiar with important experimental methods. The course is intended to make the student think critically about reliability of experimental results and to attempt to interpret them in the light of his previous chemical experience.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 1302 or 1342 or 1410 or 1480

CHEM 1431 - TOPICS IN PHYSCL CHEM WRIT PRAC

Minimum Credits: 1
Maximum Credits: 1
This course provides an opportunity for students to explore a current physical chemistry research topic and create a "journal ready" manuscript. The research topic will be chosen during the first two weeks of classes in consultation with the professor. A comprehensive outline and first draft will be prepared then reviewed with the professor. The paper is revised at least once before final submission and is a minimum of 15 pages. Conferences will be by appointment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

CHEM 1440 - PHYSICAL CHEMISTRY LABORATORY 2

Minimum Credits: 1
Maximum Credits: 1
This course has one four hour lab each week. Approximately 7 experiments are performed during the term, with an emphasis on the macroscopic properties of matter. The course is designed to expand upon the principles and techniques covered in Chem 1430 as well as to introduce the student to other scientific methods for investigating properties of materials. There is a lab fee.
Academic Career: Undergraduate
Course Component: Credit Laboratory

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CHEM 1420 and 1430) or 1301 or (CHEM 1341 and 1343) or CHEM 1480

CHEM 1460 - INTRO MODERN COMPUTATIONAL SCI

Minimum Credits: 3
Maximum Credits: 3
This course will emphasize the application of microcomputers and numerical methods for solving problems of importance in chemistry. Methods to be studied include solving systems of linear and differential equations, lEast squares fitting, eigenvalue problems, solution of nonlinear equations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHEM 1480 - INTERMEDIATE PHYSICAL CHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
A lecture course emphasizing application of principles of thermodynamics to solutions of electrolytes and non-electrolytes, electrochemical cells, physical chemistry of surfaces and macromolecules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (MATH 0240 or 0201 or 0241) and (PHYS 0111 or 0175 or 0476 or 0102 or 0202 or 0152 or 0200) and (CHEM 0120 or 0970 or 0102 or 0112 or 0420)

CHEM 1540 - INTRO TO MASS SPECTROMETRY

Minimum Credits: 3
Maximum Credits: 3
A basic, yet comprehensive, introductory course in mass spectrometry will be offered. The material will include a summary of instrumentation, special interpretation procedures and data handling. The interpretation of spectra of compounds of specific interest in geology and chemistry will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHEM 1600 - SYNTHESIS & CHARCTRZTN POLYMERS

Minimum Credits: 3
Maximum Credits: 3
Synthesis and characterization of polymers is focus of course. Current methods of polymer synthesis will be surveyed, practical implementation of reactions and kinetic consequences of reaction strategies in homopolymer, copolymer and block copolymer synthesis. Techniques for characterization of polymer molecular weight, chemical composition, and stereochemistry (Ft-IR, NMR, other spectroscopic and chemical methods) will be discussed. Brief treatment of polymer solution thermodynamics and selected topics in polymer chemistry will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CHEM 0320 or 0740 or 0208 or 0232) and (CHEM 1420 or 1480 or 1302 or 1342)
Course Attributes: Capstone Course

CHEM 1605 - SYNTH & CHARCTRZTN POLYMERS LAB

Minimum Credits: 1
Maximum Credits: 1
This course is the laboratory component of CHEM 1600. Students will gain practical experience in the synthesis of polymers and the use of modern techniques used in the characterization of the polymers they synthesize.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0320 or 0740 or 0340 or 0750; CREQ: CHEM 1600

CHEM 1620 - ATOMS, MOLECULES AND MATERIALS

Minimum Credits: 3
Maximum Credits: 3
This course will use qualitative molecular orbital theory to understand the design and performance of new materials. A link will be made between "small molecule" intuition and the solid-state perspective on large molecules. Clusters and solids.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0320

CHEM 1700 - UNDERGRADUATE RESEARCH SEMINAR

Minimum Credits: 1
Maximum Credits: 1
Seminar given by faculty on undergraduate research opportunities in chemistry. Open to all students regardless of departmental affiliation, but is designed especially to help those students who may take chemistry 1710 in their selection of a research project.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

CHEM 1701 - UNDERGRAD RES SEMINAR WRIT PRAC

Minimum Credits: 1
Maximum Credits: 1
This course, in conjunction with chemistry 1700, will allow students to write a major research paper based on a seminar given by a departmental faculty member. Extensive library work will be required. At lEast one revision of the paper will also be expected. This course will fulfill the CAS Departmental Writing requirement.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: CHEM 1700
Course Attributes: Writing Requirement Course

CHEM 1710 - UNDERGRADUATE RESEARCH

Minimum Credits: 1
Maximum Credits: 6
This is an elective course where a research project is carried out under the direction of a member of the chemistry faculty. It is for the serious student who wishes to expand his scholarly interests. Approximately four hours research per week per credit; usually no more than three credits per term.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

CHEM 1711 - UNDGR RESEARCH WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Chem 1711 will require the student to write a report in the form of a major research paper and will include a historical background to the project, an experimental or methods sections and a discussion of the results and their meaning.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Requirement Course

CHEM 1720 - UNDERGRAD TEACHING EXPERIENCE

Minimum Credits: 1
Maximum Credits: 4
Students can gain teaching experience by serving as instructors in one of the undergraduate chemistry lab courses.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

CHEM 1810 - CHEMICAL BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Revolutionary transformations in chemistry and biology have led to the merging of these disciplines where contributions from both fields impact our molecular and quantitative understanding of biology. Rapid growth in this area has been driven in part by students and researchers applying synthesis, quantitative analysis, and theoretical reasoning to the study complex cellular processes. This course focuses on enzyme mechanisms in biological pathways, kinetics and thermodynamics, and chemical tools to probe and screen components of the cell. Some other topics include DNA/RNA processing, macromolecular interactions, chemical signaling, posttranslational modifications, chemical syntheses of biomolecules, and development of assays for high throughput drug screening.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0320 and BIOSC 0160

CHEM 1815 - CHEMICAL BIOLOGY LABORATORY

Minimum Credits: 2
Maximum Credits: 2
This laboratory course will focus on chemical reactions catalyzed by enzymes. Students will learn organic syntheses, DNA mutagenesis and sequencing, protein expression and purification, biochemical assays. Students will be expected to present their findings in a seminar style talk and a poster presentation.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0345

CHEM 1830 - SYNTHETIC BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 1810 or BIOSC 1000 or BIOSC 1810

CHEM 1880 - CHEMICAL BIOLOGY FOR ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
PeopleSoft Description: Chemical engineers have made significant contributions towards the development of pharmaceutical research and manufacturing, and there are now also growing opportunities in field of biotechnology. In this course students broadly examine the nomenclature, functions and mechanisms utilized by DNA, RNA and proteins and learn foundation knowledge in order to contribute to these fields. This includes examination of enzyme mechanisms of therapeutic targets and how pathways of enzymes can produce natural products, such as terpenes and polyketides, that are common antibiotic and antifungal agents. Specialized topics will also be considered such as the engineering of proteins with new catalytic functions and metabolic engineering to produce therapeutics and commodity chemicals. Students also learn about the molecular mechanisms involved in the cellular processes of replication, transcription and translation. These topics include recombinant DNA technology and new therapeutic strategies that have emerged in manufacturing such as antisense oligonucleotide technology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Pre-req: Chem 0320 ; PLAN: Chemical Engineering

CHEM 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 6
Directed study in a specific area of chemistry to enhance preparation for undergraduate research.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Chinese

CHIN 0001 - FIRST YEAR CHINESE 1

Minimum Credits: 5
Maximum Credits: 5
This is the first term of first year chin language course intended for those who have no or little experience in this language. This course helps students to develop basic oral and written proficiency and understand the basics of chin language and culture. Students are expected to be able to converse in limited daily life situations and write short paragraphs on personal topics. Class activities will consist of pair work, group work, and presentations on the course materials and other level appropriate authentic materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

CHIN 0002 - FIRST YEAR CHINESE 2

Minimum Credits: 5
Maximum Credits: 5
This is the 2nd term of 1st year chin language course intended for those who have completed chin 1001/0001 or its equivalent. This course continues to help students to develop basic oral and written proficiency and understand the basics of chin language and culture. Students are expected to be able to converse in limited daily life situations and write short paragraphs on personal topics. Class activities consist of pair work, group work, and presentations on the course materials and other level appropriate authentic materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 0001 (MIN GRADE 'C-')
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

CHIN 0003 - SECOND YEAR CHINESE 1

Minimum Credits: 5
Maximum Credits: 5
The course aims to enhance student's abilities for speaking accurately and appropriately in increasingly challenging situations, reading and understanding narrative and descriptive texts and the relevant cultural aspects, writing short narrative paragraphs with proper discourse connectors, and conversing on a wider range of personal topics with some sophistication. This course includes recognition and production of 350 characters presented in both traditional and simplified versions. Students should have control of a cumulative total of 1,000 characters by the end of the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 0002 (MIN GRADE 'C-')
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

CHIN 0004 - SECOND YEAR CHINESE 2

Minimum Credits: 5
Maximum Credits: 5
The course aims to enhance student's abilities for speaking accurately and appropriately in increasingly challenging situations, reading and understanding a wider range of narrative and descriptive texts and the relevant cultural aspects, writing longer narrative and descriptive paragraphs with proper discourse connectors and idiomatic expressions, and conversing on personal topics with sophistication and some non-personal topics. This course includes recognition and production of 350 characters presented in both traditional and simplified versions. Students should have control of a cumulative total of 1,400 characters by the end of the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: CHIN 0003 (MIN GRADE 'C-')
Course Attributes: Asian Studies

CHIN 0005 - CHINESE FOR HERITAGE SPEAKERS

Minimum Credits: 5
Maximum Credits: 5
CHIN 0005 is a course specifically designed for heritage learners and those whose oral and aural abilities exceed their reading and writing skills. Students with an upbringing or long-term exposure to oral Chinese language use can take this course to develop their literacy skills and to gain a deeper understanding of the Chinese culture. The course also aims to help students further develop their oral and socio-cultural communication skills so that they can conduct communication in all three modes (interpersonal, interpretive, and presentational) at a higher proficiency level. Students will be immersed in Chinese language and culture through integration of cultural content knowledge and language learning. Upon completion of the course students will be able to: -pronounce sounds problematic for a majority of heritage learners -recognize Chinese radicals and use them to guess the meaning of Chinese characters - recognize and write Chinese characters -use reading strategies - make oral presentations in Chinese - write compositions in Chinese
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 0007 - INTRODUCTION TO CHINESE CIVILIZATION AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course is an interdisciplinary introduction to Chinese society and culture from earliest times to the present. We will introduce the development of China in material terms as well as in terms of competing beliefs, and the relationship of these to social groups. The first part of the course explores ancient literature, philosophy, religion, art, architecture, customs, and other aspects of china's rich and diverse heritage. The second part will be devoted to china's transition to a modern society, covering such topics as social changes, urban life, popular culture, and the values and ideas that captivate contemporary Chinese people's attention. Cultural traditions of Hong Kong, taiwan, and tibet will also be employed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

CHIN 0010 - SPECIAL TOPICS IN EAST ASIAN POP CULTURE

Minimum Credits: 1
Maximum Credits: 1
This mini pop-up course explores the spread of Asian pop across the world in conjunction with the Asian Studies Center's annual lecture series on Asian pop culture. This year's theme is East Asian pop: J-Pop (Japan), K-Pop (Korea) and Canto/Mando Pop (Hong Kong and China). In this course, students will track the lecture series and the issues to discuss include the global legacy of East Asian pop, the role of media and technology, popular music as an instrument of soft power, participatory fandom and international business. The course may also include some experiential learning opportunities such as dance workshop and field trip. At the end of the term, the students will write a reflection paper.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 0080 - CITY LIFE AND EAST ASIAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
This is a humanities based modular course designed as an introduction to important areas of East Asian civilization. The student will discover how literature, art and thought has flourished in the urban areas of china and Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 0081 - EAST ASIA IN THE WORLD

Minimum Credits: 3
Maximum Credits: 3
To enhance a greater understanding of East Asian cultures; to explore the interactions and relations between the peoples and cultures of East Asia

(china and Japan) and the rest of the world, from ancient times to the present. Literary works, memoirs, autobiographies, diaries, historical records and films will be used. Themes involve such topics as the significance of travel in self-understanding, diaspora, immigration, and changing ideas of the homeland.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CHIN 0085 - REVOLUTION, INVOLUTION, AND IDENTITY IN MODERN CHINESE CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course provides an interdisciplinary introduction to Chinese society and culture from the turn of the 20th century to the present. Specifically, it focuses on the notions of revolution, involution, and identity reflected in literary and visual representations. Exploring the dynamic between change and continuity in modern Chinese history, it seeks to examine concepts such as empire, modernity, revolution, and nation, and investigate identity formations in national, ethnic, gender, and individual levels. It will cover such topics as social changes, historical consciousness, urban life, popular culture, and the values and ideas that captivate contemporary people's imagination. Cultural orientations of Hong Kong, Taiwan, and Tibet will also be explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

CHIN 1009 - THIRD-YEAR CHINESE 1

Minimum Credits: 3
Maximum Credits: 3
The course aims to enhance student's abilities for speaking accurately and appropriately in challenging situations, reading and understanding original texts of different types, writing short essays on various topics with discourse connectors and idiomatic expressions, and conversing on both personal and non-personal topics with sophistication at discourse level. Students in this course should be aware of relevant Chinese traditions and perspectives and be able to make comparisons and connections with other cultures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 1010 - THIRD-YEAR CHINESE 2

Minimum Credits: 3
Maximum Credits: 3
The course aims to enhance student's abilities for speaking accurately and appropriately in challenging situations, reading and understanding original texts of different types, writing short essays on various topics with discourse connectors and idiomatic expressions, and conversing on both personal and non-personal topics with sophistication at discourse level. Students in this course should be aware of relevant Chinese traditions and perspectives and be able to make comparisons and connections with other cultures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 1020 - THIRD YEAR CHINESE 1

Minimum Credits: 5
Maximum Credits: 5
The course aims to enhance student's abilities for speaking accurately and appropriately in challenging situations, reading and understanding original texts of different types, writing short essays on various topics with discourse connectors and idiomatic expressions, and conversing on both personal and non-personal topics with sophistication at discourse level. Students in this course should be aware of relevant Chinese traditions and perspectives and be able to make comparisons and connections with other cultures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 0004 (MIN GRADE 'C-')
Course Attributes: Asian Studies

CHIN 1021 - THIRD YEAR CHINESE 2

Minimum Credits: 5
Maximum Credits: 5
The course aims to enhance student's abilities for speaking accurately and appropriately in challenging situations, reading and understanding original texts of different types, writing short essays on various topics with discourse connectors and idiomatic expressions, and conversing on both personal and non-personal topics with sophistication at discourse level. Students in this course should be aware of relevant Chinese traditions and perspectives and be able to make comparisons and connections with other cultures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 1020 (MIN GRADE 'C-')
Course Attributes: Asian Studies

CHIN 1025 - ASPECTS OF THE CHINESE LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
Aspects of the Chinese language will offer a linguistic introduction to Chinese. No prior knowledge of linguistics is assumed although familiarity with linguistic analysis is a plus. The Chinese language is substantially different from English or other Indo-European languages. It is also distinct from some other East Asian languages. For instance, it has a logographic writing system and is a tonal language. Its word order is more flexible than English and is a topic-prominent language. It does not have rich grammatical inflections but has a limited number of aspectual markers. The course serves the following purposes: (1) introduce the basic facts of the Chinese language including its development, the phonology, morphology, the semantic and syntactic aspects of Mandarin Chinese, and the interactions of the language with Chinese culture and the society; (2) introduce elementary linguistic concepts relevant to chinese to enable students to use the right tool to describe and critically analyze the features of a language; (3) encourage students to reflect on their language learning experience or knowledge of other languages to conduct reasoning, such as analyzing the sources of difficulty in their studying of chinese; (4) to inspire interest in a range of topics including differences in modern and classical chinese, philosophical belief embodied in the language, chinese culture manifested in the language (such as the notion of politeness, face, etc.), and to lay a foundation for further studies in linguistics as well as in those relevant topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 0002 (MIN GRADE 'B-')
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CHIN 1027 - TOPICS ON CHINESE AS A SECOND LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

CHIN 1033 - SPECIAL TOPICS: ADVANCED CHINESE ACROSS GENRES

Minimum Credits: 3
Maximum Credits: 3
To develop greater fluency, accuracy and confidence in spoken Chinese. Rhetorical and presentational skills will be introduced and reinforced. Students will narrate and describe an event/situation, maintain sustained discourses, provide structured arguments, develop hypotheses and explain as well as defend opinions. Through reading news articles on various subjects such as society, finance, politics, technology, sports and entertainment, students will gain deeper understanding of social, cultural, political and economic situations in Chinese speaking regions and will be able to conduct in-depth conversations with native speakers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHIN 1020 (MIN GRADE 'C-')

CHIN 1040 - LITERARY CHINESE 1 CLASSICAL

Minimum Credits: 3
Maximum Credits: 3
This is a course in classical Chinese whose purpose is to acquaint the student with the language and syntax of classical Chinese.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: CHIN 1020 or CHIN 1009
Course Attributes: Asian Studies

CHIN 1041 - LITERARY CHINESE 2 CLASSICAL

Minimum Credits: 3
Maximum Credits: 3
A continuation of Chinese 1040, this course will further develop the student's knowledge of vocabulary and syntactical patterns of classical Chinese.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 1040
Course Attributes: Asian Studies

CHIN 1047 - CHINESE AND WESTERN POETRY

Minimum Credits: 3
Maximum Credits: 3
A comparative study of Chinese and Western lyric poetry. This course explores the world of feeling as expressed in the poetry of two vastly different worlds; china and the West and focuses on the language of feeling in a poetic medium. The purpose of this course is to appreciate how differences between the two poetic traditions is essential to a better understanding of the two cultures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

CHIN 1050 - FOURTH YEAR CHINESE 1

Minimum Credits: 3
Maximum Credits: 3
This is an advanced language course which concentrates on reading current journalistic writings such as news reports, periodicals, articles and editorials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 1021 (MIN GRADE 'C-')

CHIN 1051 - FOURTH YEAR CHINESE 2

Minimum Credits: 3
Maximum Credits: 3
The second term of fourth year reading this course continues the student's advanced language study concentrating on reading journalistic writings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 1050 (MIN GRADE 'C-')

CHIN 1059 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

CHIN 1083 - MASTERPIECES OF CHINESE LITERATURE: PREMODERN

Minimum Credits: 3
Maximum Credits: 3
This course is devoted to the study of Chinese literature from ancient times to the end of the 19th century. Lectures and readings include prose (historical, philosophical and literary texts, legends and myths of the remote past, anecdotes, short stories and fantastic tales of ghosts and love) and poetry (from the book of songs to the poetry of the t'ang and sung periods).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

CHIN 1084 - MASTERPIECES OF CHINESE LITERATURE: MODERN

Minimum Credits: 3
Maximum Credits: 3
A critical analysis of some of the most representative literary works in modern china from a literary and socio-political perspective.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CHIN 1086 - LOVE IN CHIN AND WESTERN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
The course will explore and compare expressions of love in Chinese and Western literature. The course will examine a succession of theories and ideas of love such as platonic, religious, courtly, romantic and post-romantic from the Western tradition; love in Confucianism, Monism, Taoism, and Buddhism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 1087 - INTRODUCTION TO CHINESE NARRATIVE

Minimum Credits: 3
Maximum Credits: 3
The student is introduced to the major forms and important periods of Chinese narrative by reading and discussing a variety of Chinese narratives from the beginning of Chinese literature to the modern period. Texts include philosophical fables, historical records, mythical tales, stories of the supernatural, vernacular stories and novels.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 1088 - NEW CHINESE CINEMA

Minimum Credits: 3
Maximum Credits: 3
Students will study Chinese films made by filmmakers of mainland China and Taiwan. They will learn about origins, development, themes, and styles with major directors and important films of new Chinese cinema being studied. Students will have an opportunity to understand contemporary Chinese culture and society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CHIN 1089 - THE WORLD OF CHINA

Minimum Credits: 3
Maximum Credits: 3
This course will survey the wax and wane of pop culture through disparate phases of social and political developments of modern china. The readings will introduce students to works of literature, art, and film to see how tradition and modernity, elite and mass cultures, East and West conflict and converge; how china absorbs, adapts as well as resists capitalistic modernity while embracing global market economy; how china grapples with urban alienation, social flux, moral laxity and other negative aspects of industrialization and urbanization. The course will make available to students a host of art images, dvd clips and e-texts to enhance and expand their perception of modern china.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

CHIN 1090 - GREAT MINDS OF CHINA

Minimum Credits: 3
Maximum Credits: 3
First segment on Confucianism, including the Analects and Menicus, will be studied with relevant commentaries, stressing implications for Chinese culture, especially in ethical and socio-political dimensions. Second segment on Taoism, lao Tzu and Chuang Tzu, will be studied with emphasis on impact on the arts and literature. Final segment on Buddhism will concentrate on representative sutras of the tradition, diamond sutra and texts from the Chan (Zen) master's.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CHIN 1700 - TRANSLATION THEORY AND PRACTICE

Minimum Credits: 3
Maximum Credits: 3
This course is intended for speakers of English who possess advanced Chinese proficiency. It is an overview of theory and practice of translation from Chinese to English, including the training on hands-on translation practices. Students will use real-life translation materials such as news articles, legal documents, commercial flyers, financial reports, and technical manuals to simulate a professional translation process. Basic techniques and strategies that are practiced commonly in the translation field will be introduced and further reinforced through lectures, and research and analysis of Chinese-English bilingual websites.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHIN 1021 (MIN GRADE 'B-')
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

CHIN 1800 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CHIN 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Individual study under the guidance of a department faculty member. For the student whose topic is not covered by regular course work.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

CHIN 1906 - CHINESE INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

CHIN 1908 - DIRECTED WRITING FOR MAJORS

Minimum Credits: 1
Maximum Credits: 1
In addition to whatever written assignments are required of those enrolled in the course, this directed writing practicum provides students with an opportunity to contribute writing designed in terms of the intellectual strategies of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Asian Studies, Writing Requirement Course

CHIN 1999 - SENIOR PROJECT

Minimum Credits: 3
Maximum Credits: 3
As a summative project for all Chinese majors, the course provides students with guidelines to complete the senior project through integrating culture and language (speaking & writing), traditional & modern Chinese culture as well learning experiences acquired both at Pitt and abroad in china and /or Taiwan. They are to prepare proposals, formulate essay themes in both the English senior essay and the Chinese essay, and determine other formats that can be accepted as supplements: audio-visual, electronic, etc. Also instructs students how to find appropriate resources.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: Asian Studies, Capstone Course

Civil & Environmental Engineer

CEE 0085 - SOPHOMORE SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Required of all new students in their first year after transferring into the civil and environmental engineering department from freshman engineering or other colleges, the sophomore seminar acquaints the students with the departmental programs in the various civil engineering sub disciplines. It is conducted on weeks alternating with the departmental seminar.
Academic Career: Undergraduate
Course Component: Colloquium
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

CEE 0109 - COMPUTER METH IN CIVIL ENGRG 1

Minimum Credits: 3
Maximum Credits: 3
This course emphasizes the mathematics and problem-solving skills necessary to be an intelligent user of a variety of computational tools for engineering analysis. The first portion of the course focuses on linear algebra within the context of engineering problems. Concepts of numerical linear algebra are then introduced, followed by a brief introduction to additional discrete analysis tools such as numerical approximation and signal processing. Lastly, through the introduction of cad software and an individual term project, students are taught how to independently gain familiarity and confidence with engineering software.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: (ENGR 0012 or 0712 or 0715 or 0718 or 0016 or ET 0023) and MATH 0240 or 0201 or 0241; PROG: Swanson School of Engineering

CEE 1085 - DEPARTMENTAL SEMINAR

Minimum Credits: 0
Maximum Credits: 0
The departmental seminars are designed to acquaint the student with aspects of the civil engineering profession which are not normally encountered in classes and school activities.
Academic Career: Undergraduate
Course Component: Colloquium
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

CEE 1105 - MATERIALS OF CONSTRUCTION

Minimum Credits: 3
Maximum Credits: 3
The nature, physical properties, including environmental aspects of civil engineering construction materials are discussed. Experimentation, where applicable, is utilized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: ENGR 0141 or 0145 or ET 0051 or 0052; PROG: Swanson School of Engineering

CEE 1200 - CONSTRUCTION MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course introduces undergraduates to the construction management processes including planning, financing, contract administration, and project scheduling and controlling. It is a practical course that provides a broad knowledge of managerial decision-making for young engineers. This is the basic course for all follow-on construction courses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1203 - CONSTRUCT PROFSSN DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course teaches the student how construction-related organizations (owner, designer, contractor) are organized and managed. The course covers such topics as marketing, TGM, ethics, risk management, and personnel management. The course emphasizes a professional perspective to the practice of construction management and incorporates lectures by practitioners of various professions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Civil and Environmental Engineering
Course Attributes: Global Studies

CEE 1206 - CONSTRUCTION & COST OF ELECTRICAL SUPPLY

Minimum Credits: 3
Maximum Credits: 3
This course teaches basic construction and cost estimating methodologies for single and three-phase electrical distribution systems that include wiring, power, and controls. The course uses commercial estimating systems and the national electrical code.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1207 - CONSTRUCTION AND COST OF MECHANICAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course teaches the student how to plan, organize, and execute mechanical construction operations; and the methodologies for estimating their costs. The course covers mechanical systems such as water (supply and waste), HVAC, fire protection, and their controls.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1210 - ENGR AND SUSTAINABLE DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course is intended as an introductory interdisciplinary engineering course. Topics include principles of sustainable design in engineering, manufacturing, infrastructure, communications, and community development; overview of environmental issues for engineers; design for the environment; models of environmental processes; introduction to the use of life cycle assessment; and case studies examining the relationship of green design and the field of engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1217 - GREEN BUILDING DESIGN AND CONSTRUCTION

Minimum Credits: 3
Maximum Credits: 3
Understanding the design and construction of green buildings are key elements in green and sustainable engineering. This course teaches all of the major aspects of green building design and construction, including sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation, and design process. The United States green building council's leadership in energy and environmental design green building rating system is used to demonstrate one possible green building rating system. Life cycle thinking will be discussed to expand the focus from not only design and construction, but also use, operations, and decommissioning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1218 - DESIGN FOR THE ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
DESIGN FOR THE ENVIRONMENT (DFE) IS A SPECIFIC SET OF DESIGN PRACTICES AIMED AT CREATING ECO-EFFICIENT PRODUCTS AND PROCESSES. INCORPORATING SUSTAINABILITY INTO PRODUCT AND PROCESS DESIGN AS A DESIGN CONSTRAINT IS CLEARLY A NECESSITY, AS ALL ENGINEERS MUST UNDERSTAND THE LIMITS ON NATURAL RESOURCES. STUDENTS WILL BE INTRODUCED TO THE DFE TOOLBOX WHICH INCLUDES DESIGN FOR DEMANUFACTURE, LIFE CYCLE ASSESSMENT, AND ECOFRIENDLY MATERIALS SELECTION. STUDENTS WILL ALSO BE EXPOSED TO REAL WORLD INDUSTRY SUSTAINABILITY CHALLENGES AND HANDS ON LAB EXPERIENCES DESIGNED IN CONJUNCTION WITH LOCAL INDUSTRY AND ORGANIZATION PARTNERS. THE COURSE IS ALSO INTENDED TO BE INTER-DISCIPLINARY BETWEEN ENGINEERING AND BUSINESS STUDENTS TO FOSTER A BALANCE BETWEEN SUSTAINABILITY DESIGN EFFORTS AND BUSINESS PLANS AND STRATEGIES. STUDENTS CAN EXPECT THAT LABS WILL CONSIST OF A MIX OF FIELD TRIPS TO PARTNER COMPANIES AND LABS AT THE UNIVERSITY. A MAJOR ASPECT TO THE COURSE WILL INVOLVE STUDENT PARTNERSHIPS WITH LOCAL COMPANIES; STUDENTS WILL BE CHALLENGED TO APPLY THEIR DFE SKILLS TO PROJECTS THAT ADDRESS SUSTAINABILITY CHALLENGES. ADDITIONALLY, STUDENTS WILL HAVE THE OPPORTUNITY TO PARTICIPATE IN A SUMMER RESIDENCY TO IMPLEMENT THEIR PROJECT WITH THEIR SPONSOR COMPANY AT THE END OF THE COURSE.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1233 - CONSTRUCTION DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
Consists of comprehensive projects with emphasis on the nature of engineering problem solving and creative aspects of design in managerial

decision-making of construction in such areas as estimating, scheduling, methods, risk management, and finance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1200 or CET 1152; PROG: Swanson School of Engineering
Course Attributes: Capstone Course

CEE 1330 - INTRODUCTION TO STRUCTURAL ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
An introduction to linear analysis of statistically determinate, and indeterminate, elastic structural systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0250 or 0290 or 0202 or 1035) and (ENGR 0141 or 0145 or ET 0053); PROG: Swanson School of Engineering

CEE 1333 - STRUCTURAL DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
Comprehensive (capstone) structural design project for a building or a bridge, emphasizing conceptual design, design of footings and superstructure, and preparation of cad drawings, a final written and a final oral report.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1340 or 1341) or (CET 1111 or 1112) and (ENGR 0151); PROG: Swanson School of Engineering
Course Attributes: Capstone Course

CEE 1335 - DESIGN OF STRUCTURES

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the design of building and bridge structures focusing on structural theory, flow of forces, materials selection and selection of structural systems. Structural analysis concepts for a variety of structural types (trusses, frames, plates, membranes and shells) will be introduced or reinforced. Introduction to fundamental structural design in concrete, steel and timber will be affected through design projects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CEE 1340 - CONCRETE STRUCTURES 1

Minimum Credits: 3
Maximum Credits: 3
An introductory concrete design course based on the ACI 318 code. Fundamental topics relating to behavior, strength and design of reinforced concrete beams, one-way slabs, short columns, and footings are presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1105 or CET 1151) and (CEE 1330 or CET 1111); PROG: Swanson School of Engineering

CEE 1341 - STEEL STRUCTURES 1

Minimum Credits: 3
Maximum Credits: 3
An introductory steel design course based on the load and resistance factor design philosophy. Fundamental topics related behavior, strength and design of tension members, columns, beams, beam-column and simple connections are treated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1105 or CET 1151) and (CEE 1330 or CET 1111); PROG:Swanson School of Engineering

CEE 1370 - INTRODUCTION TO NONDESTRUCTIVE EVALUATION AND STRUCTURAL HEALTH MONITORING

Minimum Credits: 3
Maximum Credits: 3
The course aims at providing an overview of the different techniques for the nondestructive evaluation (NDE) and the structural health monitoring (SHM) of civil and aerospace structures. Techniques such as electrical resistance strain gauges, fiber optic sensing and ultrasonics will be described within the framework of the NDE. Applications to materials characterization and defect detection will be discussed with emphasis on steel and composite structures. Global and local methods for SHM will be introduced with emphasis on vibration and ultrasonic methods, respectively. The course will also provide the essential tools necessary for the digital signal processing of ultrasonic data. Matlab and laboratory exercises on recent researches will be investigated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1401 - OPEN CHANNEL HYDRAULICS DESIGN

Minimum Credits: 3
Maximum Credits: 3
Review of the basic principles of open channel flow. Design of flood control channels, riprap, gravity sewer, storm water sewer, grass-lined and natural streams are covered. Design of such hydraulic structures as spillways, stilling basins, drop structures and culverts. Other topics include the hydraulic impact from various encroachments such as from bridges, sediment discharge, scour and the utilization of the HEC-RAS computer program.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1402; PROG:Swanson School of Engineering

CEE 1402 - FLUID MECHANICS

Minimum Credits: 3
Maximum Credits: 3
A first course in fluid mechanics discussing basic principles and methods for studying static and dynamic behaviors of fluids. In the laboratory the students conduct experiments on fluid flow in pipes and open channels.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0141 and MATH 0240; LVL: Jr or Sr; PROG: Swanson School of Engineering (UENGR)

CEE 1410 - WATER RESOURCES ENGINEERING DESIGN

Minimum Credits: 3
Maximum Credits: 3
Basic principles of hydrologic analysis and design. Estimation of missing/bad hydrologic data for analysis. Hydrologic design using the probable maximum flood, reservoir design floods, reservoir storage allocation and reallocation. Climate variability and impacts on hydrologic design. Hydrologic design using SCS methods, detention pond design, and design of dams. Reservoir reliability for water supply, and reservoir sedimentation. Emergency action plans and response to extreme hydrologic events, ice engineering, and groundwater well design. Dam safety, hydrologic design memorandums and manuals, and portfolio risk assessment for dams and levees. Labs focus on the utilization of various water resources engineering software, i.e. HEC-HMS, TR-55, TR-20, and SWMM; PROG:Swanson School of Engineering
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1402 and 1412) or (CET 1140); PROG: Scool of Engineering

CEE 1412 - INTRODUCTION TO WATER RESOURCES ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Introduction to the basic concepts of surface water hydrology, meteorology, and fields of water resources engineering. Topics include: hydro-meteorological field measurement and computational methods, historical floods and droughts, flood and drought forecasting, groundwater hydrology, statistical analysis of hydrologic data, urban storm water management, irrigation, urban water supply, operational hydrology, water resources

projects, water quality as it relates to hydrology, economic aspects of water resources, and introductions into open channel hydraulics and coastal engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1102 or 1105 or ENGR 0020 or MATH 1153) and (CEE 1402 or CET 1140); PROG: Swanson School of Engineering

CEE 1433 - WATER RESOURCES DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
Consists of comprehensive projects with emphasis on the nature of engineering problem solving and the creative aspects of design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1401 or 1410 or 2400 or 2401 or 2405 or 2410; PROG: Swanson School of Engineering
Course Attributes: Capstone Course

CEE 1503 - INTRO TO ENVIRONMENTAL ENGRNG

Minimum Credits: 3
Maximum Credits: 3
Fundamentals of environmental science and engineering as applied to water and wastewater treatment, air quality control, and solid and hazardous waste management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHEM 0102 or 0112 or 0120 or 0420 or 0720 or 0770 or 0970; PROG: Swanson School of Engineering
Course Attributes: Global Studies

CEE 1504 - CHEMISTRY IN ENVIRONMENTAL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course will build on fundamentals introduced in CHEM 0960/0970 (chemistry for engineers), applying chemical concepts in the context of environmental science and engineering. Topics covered include chemical kinetics, thermodynamics, and equilibria, organic chemistry, and biochemistry. These concepts will be explored within the primary environmental media, water, soil and air. Students will be expected to work independently and in groups to tackle problem sets, in-class problems, and a class term project. Further, this course serves as a bridge to advanced courses in the environmental engineering curriculum where the concepts introduced will be further applied to understanding important environmental phenomena in CEE 1520 (mass and energy balances in environmental engineering) and CEE 1522 (fate and transport in environmental engineering), and techniques used to analyze environmental samples in CEE 1523 (environmental engineering laboratory).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CEE 1505 - WATER TREATMENT AND DISTRIBUTION SYSTEM DESIGN

Minimum Credits: 3
Maximum Credits: 3
Stepwise development and process design, equipment selection, economic evaluation, layout, and operating guidelines for water treatment, storage and distribution systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1503 and 1402) or CET 1141; PROG: School of Engineering
Course Attributes: Hourly Final

CEE 1511 - ENVIRONMENTAL ENGINEERING PROCESS LABORATORY

Minimum Credits: 3
Maximum Credits: 3

Chemical and biological laboratory procedures and techniques for instrumental analysis applied to evaluation of liquids and gases for environmental assessment and operation and control of environmental quality control systems
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1503; PROG: Swanson School of Engineering

CEE 1513 - ENVIRONMENTAL ENGRNG PROCESSES

Minimum Credits: 3
Maximum Credits: 3
Introduction to basic design concepts applied to water and wastewater treatment, air quality control, and solid and hazardous waste management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1503 or CET 1141; PROG: Swanson School of Engineering

CEE 1514 - ENVIRONMENTAL IMPACT ASSESSMENT

Minimum Credits: 3
Maximum Credits: 3
Technical and procedural aspects of environmental impact analysis and assessment with emphasis on regulatory framework, characterization of impacts and their remediation, and the decision process when applied to engineering systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1503 or CET 1141; PROG: School of Engineering

CEE 1515 - WASTEWATER COLLECTION AND TREATMENT PLANT DESIGN

Minimum Credits: 3
Maximum Credits: 3
Stepwise development and process design, equipment selection, economic evaluation, layout, and operating guidelines for wastewater collection and treatment systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1503 and 1402) or CET 1141; PROG: School of Engineering

CEE 1520 - MATERIAL AND ENERGY BALANCES IN ENVIRONMENTAL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Introduces students to engineering calculations involving material and energy balances around environmental and chemical processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Civil & Environmental Engineering; PREQ: CEE 1503 and MATH 0240 and CHEM 0970

CEE 1522 - FATE AND TRANSPORT IN ENVIRONMENTAL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
An introduction to the thermodynamic and kinetic drivers of chemical fate in the environment. Processes governing the diffusion, advection and transformation of chemicals in air, water and soil. Inter-media exchange, environmental degradation and uptake into biotic systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1503; PROG: Swanson School of Engineering

CEE 1523 - ENVIRONMENTAL ENGINEERING LAB

Minimum Credits: 3
Maximum Credits: 3
Chemical and biological laboratory procedures for environmental assessment and operation and control of environmental quality control systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1503 or CET 1141; PROG: Swanson School of Engineering
Course Attributes: Global Studies

CEE 1533 - ENVRL ENGR DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
Group design of an engineered system for environmental quality control.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1505 or 1507 or 1513 or 1515 or (CET 1141 and 1142); PROG: School of Engineering
Course Attributes: Capstone Course

CEE 1609 - LIFE CYCLE ASSESSMENT METHODS AND TOOLS

Minimum Credits: 3
Maximum Credits: 3
This class will introduce students to life cycle thinking and provide engineers with tools to assess the sustainability and environmental impact of a product, process, or activity. Life cycle assessment (LCA) principles, methods, tools, and challenges will be explored throughout the course. Topics include material and energy flow analysis, environmental indicators and metrics for sustainability, case studies of LCA applications, and impact assessment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0140 or 0220 or 0221; PROG: Swanson School of Engineering

CEE 1610 - ENGINEERING AND SUSTAINABLE DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course is intended as an introductory interdisciplinary engineering course. Topics include principles of sustainable design in engineering, manufacturing, infrastructure, communications, and community development; overview of environmental issues for engineers; design for the environment; models of environmental processes; introduction to the use of life cycle assessment; and case studies examining the relationship of green design and the field of engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CEE 1617 - GREEN BUILDING DESIGN AND ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Understanding the design and construction of green buildings are key elements in green and sustainable engineering. This course teaches all of the major aspects of green building design and construction, including sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation, and design process. The united states green building council's leadership in energy and environmental design green building rating system is used to demonstrate one possible green building rating system. Life cycle thinking will be discussed to expand the focus from not only design and construction, but also use, operations, and decommissioning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CEE 1618 - DESIGN FOR THE ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3

Global population growth, resource scarcity, a changing climate, and an increasingly stressed water supply are significant environmental challenges we face today. The prominence of these challenges has led to increased awareness and demand for more sustainable approaches to engineering design and policy strategies. These topics will be discussed in design for the environment and will serve as motivation for the development of innovative design solutions to 'real-world' sustainability challenges. The course will begin with an introduction to sustainability, design frameworks, the design process and the role of innovation, followed by systems thinking, metrics to quantify and evaluate the sustainability of alternatives, and assessing toxicity and risk. The second half of the course will introduce students to designing appropriate technologies within the context of the developing world as well as a series of relevant case studies (e.g., energy, water, agriculture, nanotechnology). Design will be incorporated throughout the course as a way for students to apply what they learn in class to the development of an innovative solution to a sustainability challenge. The course integrates active learning components that provide students the opportunity to exercise the engineering design process, work effectively in a group, and practice written and oral presentation skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1700 - TRAFFIC MANAGEMENT AND OPERATIONS

Minimum Credits: 3
Maximum Credits: 3
Introduction to traffic flow theory and characteristics. Highway capacity analysis. Basic traffic management and control.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1703 - TRANSPORTATION ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Introduction to the design, planning, operation, management, and maintenance of transportation systems. Transportation planning inter-modal transportation systems (highway, air, rails, etc.). Transportation planning of highways, airports, and railroads with traffic flow models, capacity analysis, and safety. Concepts for designing facilities and systems area study with life cycle costing procedures and criteria for optimization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: MATH 0240 or 0201 or 0241; PROG: Swanson School of Engineering

CEE 1704 - LAND DATA ANALYTICS

Minimum Credits: 3
Maximum Credits: 3
An Introduction to Land Surveying and Development for Civil Engineers. Topics include property and construction surveying plus land development and highway engineering. Students will learn how to utilize Surveying and other Land Data for all design disciplines in Civil Engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0240; PLAN: Civil & Environmental Engineer

CEE 1710 - TRAFFIC CONTROL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
A range of traffic control systems including the analysis and design of traffic signals are discussed along with traffic signal systems. Other topics covered include data collection for traffic control systems, optimization software and models; traffic signal hardware design; traffic signal systems selection (adaptive traffic signal systems versus traditional systems) and design and implementation. Pre-requisite CEE 1703 for 1710 and CEE 2700 for 2710
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1711 - ADVANCED TRANSPORTATION MANAGEMENT STRATEGIES

Minimum Credits: 3
Maximum Credits: 3
This is a management-oriented course that covers key aspects of how government transportation agencies operate their transportation systems. Focus is on the strategies that are used to improve public safety and mobility, including traffic incident management, traffic management, traveler information and pricing. Emphasis is also placed on processes, including planning, performance management and systems engineering, that agencies apply in advancing programs and projects. The course concludes with a look at the future, including the effects that automated vehicles and Smart City concepts will have on the future of transportation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1714 - PAVEMENT DESIGN AND ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Concepts and principles in the structural design of pavements for highways and airfields including: traffic loads, climatic factors, soil and material characterization. Application of current pavement design practices and procedures. Economic evaluation of highway and airport pavements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1105 and 1811; PROG: Swanson School of Engineering

CEE 1715 - PAVEMENT MAINTENANCE AND REHAB

Minimum Credits: 3
Maximum Credits: 3
Engineering concepts and information needed to maintain and rehabilitate pavements. Project evaluation, testing and analysis. Design of rigid and flexible overlays, and other methods of rehabilitation. Selection of rehabilitation alternatives. Analysis of the effects of maintenance activities on pavement performance. Initial and life cycle cost analysis of various rehabilitation alternatives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1105 or CET 1151; PROG: Swanson School of Engineering

CEE 1717 - COMPONENTS, PROPERTIES AND DESIGN OF PORTLAND CEMENT CONCRETE

Minimum Credits: 3
Maximum Credits: 3
Examines the influence of constituent materials (cements, aggregates and admixtures) on the properties of fresh and hardened concrete, mix design handling and placement of concrete; and behavior of concrete under various types of loading and environment; test methods, designing concrete mixes for specific applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1105 or CET 1151; PROG: Swanson School of Engineering

CEE 1718 - ADVANCED CONSTRUCTION AND BITUMINOUS MATERIALS

Minimum Credits: 3
Maximum Credits: 3
Advanced construction and bituminous materials soils, soil stabilization, aggregates, bituminous materials and mixtures. Advanced topics in selection and design of bituminous materials. Asphalt cement, rheology, emulsions, chip seals, hot-mix asphalt design, visco-elasticity characterization
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1105 or CET 1151; PROG: School of Engineering

CEE 1720 - URBAN TRANSPORTATION PLANNING

Minimum Credits: 3
Maximum Credits: 3

All aspects of the transportation planning process including transportation planning and decision making, transportation modeling, demand and supply analysis, transportation studies, environmental issues and project implementation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1703; PROG: Swanson School of Engineering

CEE 1725 - PUBLIC TRANSPORTATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to give seniors and graduate students a basic background in the planning, operations and development of public transportation systems within the context of the overall transportation system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1703; PROG: Swanson School of Engineering

CEE 1730 - HIGHWAY ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Highway administration, classification, planning and programming. Geometric design of highways. Traffic characteristics and capacity analyses. Traffic operations and control. Highway design project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1703; PROG: Swanson School of Engineering

CEE 1733 - TRANSPORTATION DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
Consists of comprehensive projects with emphasis on the nature of engineering problem solving and the creative aspects of design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 2700; PROG: Swanson School of Engineering
Course Attributes: Capstone Course

CEE 1750 - PROJECT DEVELOPMENT AND IMPLEMENTATION

Minimum Credits: 3
Maximum Credits: 3
Project development and implementation - 3 credits: this course provides overview of the process used in project programming and planning, design, construction and operation. The course will emphasize the process used for implementation of major projects with emphasis on construction management and how that task interfaces with other aspects of project development. Students will be involved in a team effort to conceptualize the project, plan alternatives, determine the environmental impact, examine design alternatives, prepare the project for construction documents, recommend award of the contract, manage the contract during construction and determine operational needs of the project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1703; PROG: Swanson School of Engineering

CEE 1800 - ENGINEERING GEOLOGY

Minimum Credits: 3
Maximum Credits: 3
Review of basic geologic principles with emphasis on the importance and influence of geology and geologic processes on engineering projects such as dam sites, foundations, tunnels, mine subsidence, landslides, highways, groundwater problems, and seismic studies.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 1809 - HYDRAULIC FRACTURING MECHANICS

Minimum Credits: 3
Maximum Credits: 3
This class will prepare students to wisely and critically design hydraulic fracturing treatments as well as make informed recommendations to employers, governments, and communities about the risks and benefits of hydraulic fracturing methods. Upon completion of this course, students will be equipped to use engineering formulae to estimate hydraulic fracture dimensions, evaluate strengths and weaknesses of various modeling approaches, characterize subsurface conditions from wellbore pressure analysis, make sound recommendations for monitoring, and compare and contrast approaches and risks for a range of application domains.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1330 and 1402; PROG: Swanson School of Engineering

CEE 1811 - PRINCIPLES OF SOIL MECHANICS

Minimum Credits: 3
Maximum Credits: 3
Basic soil properties, permeability, capillarity and frost action, compaction, stresses in soil masses, two-dimensional seepage, compressibility, stress-strain-time behavior, and shear strength.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0141 or 0145 or ET 0053; PROG: Swanson School of Engineering

CEE 1821 - FOUNDATION ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Application of the principles of soil mechanics to the analysis and design of foundations, the stability of slopes and retaining structures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CEE 1811 or CET 1131) and CEE 1330; PROG: School of Engineering

CEE 1833 - GEOTECHNICAL DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
Consists of comprehensive projects with emphasis on the nature of engineering problem solving and the creative aspects of design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CEE 1714 or 1715 or 1821 or 2814 or CET 1124 or 1131; PROG: Swanson School of Engineering
Course Attributes: Capstone Course

CEE 1996 - SPECIAL PROJECTS

Minimum Credits: 1
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

CEE 2201 - CONSTRUCTION COST ENGINEERING

Minimum Credits: 3
Maximum Credits: 3

This course teaches the methodology for estimating construction costs. The course covers all types of costs and all types of construction. The student is introduced to standard reference materials and to computerized estimating systems. The course teaches methods and procedures for developing accurate estimates and the basis for follow-on cost control.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2202 - CONSTRUCTION SCHEDULING

Minimum Credits: 3
Maximum Credits: 3
This course teaches the student the theory and practice of planning, scheduling, and controlling the time and cost of construction projects. The course covers various advanced techniques such as cost duration analysis, critical resource analysis, stochastic modeling, and cost control. The course teaches the use of contemporary computerized software systems with hands-on application.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2203 - CONSTRCT METHODS AND EQUIPMENT

Minimum Credits: 3
Maximum Credits: 3
This course teaches the student how to plan, organize, and execute construction operations. The course includes typical operations in both building construction and engineering construction. The course describes how to properly construct in order to achieve quality and productivity objectives.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2204 - CONSTRUCTION LAW AND RISK MGMNT

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to the legal and risk management issues in construction. The course covers the principles of contract law and various legal areas affecting construction such as environmental regulations, insurance, bonds, tort liability, dispute resolution, and professional services.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2205 - CONSTRCT FINANCE & COST CONTROL

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to the company level financial and accounting systems which are used in the construction industry, and to project control systems which are used to manage cost and time. The course includes such topics as financial accounting, cost accounting, financial statements, and variance analysis.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2206 - CONSTRCT & COST OF ELEC SUPPLY

Minimum Credits: 3
Maximum Credits: 3
This course teaches basic construction and cost estimating methodologies for single and three-phase electrical distribution systems that include wiring, power, and controls. The course uses commercial estimating systems and the national electrical code.
Academic Career: Graduate

Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2207 - CONSTRCT & COST OF MECHL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course teaches the student how to plan, organize, and execute mechanical construction operations; and the methodologies for estimating their costs. The course covers mechanical systems such as water (supply and waste), HVAC, fire protection, and their controls.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PROG: Graduate School of Engineering

CEE 2230 - BUILDING INFORMATION MODELING

Minimum Credits: 3
Maximum Credits: 3
The goal of this course is to introduce the students to building information modeling (BIM) and other new and evolving technologies which are revolutionizing the building and horizontal infrastructure construction industry. Students will learn how BIM and other innovative technologies are being adopted currently by progressive builders to streamline the construction process through enhanced coordination, visualization, logistical planning, cost estimation and analysis. They will also learn how these new tools are enabling (and in some instances requiring) new highly integrated processes that are redefining architecture, engineering, construction and operations (AECO) business relationships and delivery contracts.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PROG: Swanson School of Engineering

CEE 2320 - ADVANCED MECHANICS OF MATERIALS

Minimum Credits: 3
Maximum Credits: 3
The fundamentals of elasticity are introduced and related to various problems such as beams and bars on elastic foundations, unsymmetrical bending, torsion of thin walled members, curved bars, failure theories, and stability.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2330 - ADVANCED STRUCTURAL ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Theory and application of matrix stiffness and flexibility methods for analysis of framed structures. Computer implementation for the solution of two- and three-dimensional frames, trusses, and grid systems.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2333 - INTRODUCTION TO FINITE ELEMENTS

Minimum Credits: 3
Maximum Credits: 3
Introduction to the finite element method and its application to various problems of elastic elements and structures. Both physical and variational approaches are used.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Swanson School of Engineering

CEE 2340 - CONCRETE STRUCTURES 2

Minimum Credits: 3
Maximum Credits: 3
Advanced behavior, strength and design of reinforced concrete structures, including column and frame stability effects, two-way slabs, and serviceability criteria. Introduction to earthquake design concepts.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LG/SNC
Course Requirements: PROG: Graduate School of Engineering

CEE 2341 - STEEL STRUCTURES 2

Minimum Credits: 3
Maximum Credits: 3
Advanced design criteria for steel structures, including composite beams, columns, and frames; member and system stability; first- and second- order analysis of frames; and serviceability criteria.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2343 - PRESTRESSED CONCRETE

Minimum Credits: 3
Maximum Credits: 3
Design of prestressed concrete beams and slabs, including shear and torsion effects.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LG/SNC
Course Requirements: PROG: Graduate Engineering Students

CEE 2346 - REPAIR AND RETROFIT OF STRUCTURES

Minimum Credits: 3
Maximum Credits: 3
Introduction and use of performance-based design concepts. Analysis and modeling techniques for existing and repaired structures. Gravity and lateral load retrofit procedures. Selection, modeling and design of repair and/or retrofit measures for a variety of structures and building materials. Retrofit for blast loads.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Swanson School of Engineering

CEE 2347 - BRIDGE ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Introduce concepts of bridge engineering by providing the students with the necessary knowledge and skills to apply the AASHTO lRFD specifications for the analysis and design of highway bridge superstructure components.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Swanson School of Engineering

CEE 2360 - DYNAMICS OF STRUCTURES

Minimum Credits: 3
Maximum Credits: 3
Fundamentals of free and forced vibration of one and multi degree of freedom structures, including damping. Matrix formulation of multi-degree of freedom structures. Analytical and numerical methods for determining response; deflection and stress evaluation including damping effects.

Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Swanson School of Engineering

CEE 2401 - OPEN CHANNEL HYDRAULICS

Minimum Credits: 3
Maximum Credits: 3
Basic theories and principles of open channel flows (including flows in rivers and streams). Methods of calculating uniform flow, gradually varied flow, rapidly varied flow, and unsteady flow. Design of open channels.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate Engineering Students

CEE 2500 - ENVRNMNTL ENGRG MICROBIOL

Minimum Credits: 3
Maximum Credits: 3
Biological fundamentals as applied to the description and evaluation of natural environments and environmental quality control systems.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2501 - ENVIRONMENTAL ENGINEERING CHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
Chemical fundamentals as applied to the description and evaluation of natural environments and environmental quality control systems.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2502 - PHYSICAL-CHEMICAL PRINCIPLES IN ENVIRONMENTAL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Basic principles and applications of thermodynamics, reaction kinetics, equilibria, diffusion, and mass transfer.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2507 - INDUSTRIAL WASTE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Problems and approaches to industrial waste treatment and disposal, pollution prevention and sustainability, waste minimization, process selection, control, and resource recovery.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PROG: Graduate School of Engineering

CEE 2513 - ENVIRONMENTAL IMPACT ASSESSMNT

Minimum Credits: 3
Maximum Credits: 3

Technical and procedural aspects of environmental impact analysis and assessment with emphasis on regulatory framework, characterization of impacts and their remediation, and the decision process when applied to engineering systems.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2609 - LIFE CYCLE ASSESSMENT METHODS AND TOOLS

Minimum Credits: 3
Maximum Credits: 3
Life cycle assessment (LCA) is a tool for evaluating the environmental impacts of a product or process by documenting energy and material flows from inception to ultimate disposal. This course teaches framework, methods, and tools that can be applied to decision making in the design, construction, operation, and maintenance of the built environment. Topics include the principles of life cycle assessment, case studies of applications of life cycle assessment, methods for life cycle inventory, and methods for life cycle impact assessment. The course aims to encourage systems thinking and to facilitate life cycle applications to graduate students' individual research topics. Students can expect to develop a project and paper applying LCA to their research topic. In most cases, students will produce a publishable journal article at the end of the semester.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade

CEE 2717 - COMPONENTS, PROPERTIES AND DESIGN OF PORTLAND CEMENT CONCRETE

Minimum Credits: 3
Maximum Credits: 3
Examines the influence of constituent materials (cements, aggregates and admixtures) on the properties of fresh and hardened concrete, mix design handling and placement of concrete; and behavior of concrete under various types of loading and environment; test methods, designing concrete mixes for specific applications.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PROG: Graduate School of Engineering

CEE 2801 - ADVANCED SOIL MECHANICS

Minimum Credits: 3
Maximum Credits: 3
Mathematical and graphical operations on stress and strain, seepage analysis and flow net, consolidation theory, upper and lower bound analysis, earth pressure theory, bearing capacity, and plasticity based soil models.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2802 - GEOTECHNICAL ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Fundamentals of the analytical and numerical methods in geotechnical engineering are explored. Emphasis will be placed upon implementation and verification of various formulations into basic programs. Seepage, stress distribution, settlement, consolidation, sheet piling wall, and beams on elastic foundations are some of the topics covered.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2814 - SLOPES & EARTH RETAINING STRUCT

Minimum Credits: 3
Maximum Credits: 3
Conventional methods and recent advances in slope stability analyses; classical and modern earth pressure theories; design of rigid and flexible retaining structures; earth dams, their design and stability.

Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PROG: Graduate School of Engineering

CEE 2818 - ADVANCED FOUNDATION ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Subsurface exploration and control of groundwater; current procedures for the analysis, design, and construction of waterfront structures and shallow and deep foundations.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis
Course Requirements: PREQ: CEE 2801; PROG: Swanson School of Engineering

Classics

CLASS 0010 - GREEK CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
A general introduction to the culture and society of Ancient Greece, with emphasis on the Archaic Period and the fifth and fourth centuries B.C.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

CLASS 0020 - ROMAN CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
A general introduction to the culture and society of the Roman world, with emphasis on the period of the republic and the early empire.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

CLASS 0030 - MYTHOLOGY IN THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
This course examines in cultural context the traditional stories--myth, legend, and folktale--of the ancient Greeks and Romans. Theories drawn from various disciplines are critically evaluated. Attention to connections with ritual practice and to expression in daily life, art, architecture, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Geographic Region General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

CLASS 0032 - ATHLETICS OF THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
This course examines athletic competition, popular games, gladiatorial and other exhibitions of the ancient Greeks and Romans. Much emphasis on the social/cultural context and underlying values. Attention to relevant artistic archaeological, and historical settings.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CLASS 0034 - WOMEN AND MEN IN ANCIENT MEDITERRANEAN

Minimum Credits: 3
Maximum Credits: 3
An examination of ancient Mediterranean society, particularly that of Greece and Rome, from the perspective of male and female gender roles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

CLASS 0035 - WOMEN AND MEN ANCIENT MEDITERRANEAN/WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking class 0034 as a writing course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: West European Studies, Writing Requirement Course

CLASS 0037 - MYTH IN ANCIENT WORLD/WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking class 0030 as a writing course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

CLASS 0040 - SEX AND LOVE IN ANCIENT LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course investigates representations of sex and romantic love in ancient Greece and Rome, considering how ancient literature treats issues like marriage and infidelity, sex work and slavery, homosociality and homosexuality, and consent and rape. We will engage with a variety of genres of ancient literature, from epic and lyric poetry, to drama and philosophy, to funerary epitaphs, handbooks, and novels. We will read the canonical literature of "dead white men," alongside women writers like Sappho and Sulpicia, as well as documentary texts, especially curse tablets and funerary monuments, that paint a picture of lived experiences in the ancient world. We will also read selections from post-classical literature to explore how modern ideas about love, sex, beauty, and desire have been shaped by their representation in ancient texts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CLASS 0100 - MASTERPIECES GREEK AND ROMAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
An introduction to the critical analysis of literary works through the medium of selected masterpieces of Greek and Roman literature in English translation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

CLASS 0300 - HISTORY OF ANCIENT PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
The aim of this course is to introduce students to some of the main achievements and leading ideas of Greek philosophy up to classical times. Emphasis will be on understanding and evaluating the arguments and ideas of the Greek philosophical tradition.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Intensive Course (WRIT)

CLASS 0302 - HISTORY ANCIENT PHILOSOPHY/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
The aim of this course is to introduce students to some of the main achievements and leading ideas of Greek philosophy up to classical times. Emphasis will be on understanding and evaluating the arguments and ideas of the Greek philosophical tradition. Special writing component for CLASS 0300, "History of Ancient Philosophy".
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

CLASS 0330 - MYTH AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
The Greeks in the sixth to fourth century B.C. Initiated forms of thinking we have from then on called "scientific" and "philosophical". This course examines the question of how science is distinguished from "non-science" by studying the role of myth and science in ancient Greece. The aim is to understand what distinguishes the ideas of the first scientists and philosophers from those earlier beliefs called myth.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

CLASS 0400 - ANCIENT EMPIRES

Minimum Credits: 3
Maximum Credits: 3
Empires dominate and control resources over broad geographical areas, establishing systems (administrative, religious, and intellectual) to perpetuate and justify that control. The course will survey the archaeological remains of the principal empires of the ancient near East and Mediterranean, emphasizing both the modes of control and the themes or messages used to justify it.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

CLASS 0500 - ANCIENT ART

Minimum Credits: 3
Maximum Credits: 3
The Mediterranean Sea is a lake and its shores have produced many important cultures and artistic traditions. The course will survey the artistic traditions of Turkey and the near east, Egypt, Greece and Rome. Special attention will be paid to (1) the relationship between the artistic traditions of

individual areas and the societies which produced them, and (2) the way in which influences from one culture were transformed by another.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

CLASS 0600 - INTRODUCTION TO MEDITERRANEAN ARCHAEOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CLASS 0618 - DEATH IN THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
The death of a loved one is an emotional and powerful occurrence that provokes a variety of human responses. In addition to writings describing their funerary practices, the civilizations of the ancient Mediterranean region have left artistic representations of death and dying, built tombs, and objects associated with funerary rituals. The study of these texts, images, structures, and objects allows us to better understand ancient attitudes and reactions to death. This undergraduate lecture focuses on the visual and material evidence of funerary practices and beliefs in ancient Egyptian, Greek, and Roman societies. The subject will be approached thematically. First, we will explore how archaeologists discover death-related artifacts and how scholars approach the study and reconstruction of ancient death rituals. Ancient practices and beliefs regarding the mummification, the funeral, commemorative strategies, visits to the grave, and the afterlife will be explored, and images found on specific media (vases, sculpture, built tombs, paintings) will be discussed in depth. The course will conclude with discussions of the roles that sensational topics, like fear of the undead (zombies, vampires, and ghosts) and spectacles of death (gladiatorial contests and public executions), played in ancient Mediterranean civilizations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

CLASS 0650 - ARCHAEOLOGY OF THE BODY

Minimum Credits: 3
Maximum Credits: 3
This interdisciplinary undergraduate course explores the archaeological evidence of the human body in various Mediterranean civilizations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CLASS 1022 - THE AUGUSTAN AGE

Minimum Credits: 3
Maximum Credits: 3
A survey of the political, intellectual, literary, and artistic achievements of Rome in the time of Augustus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

CLASS 1050 - COMPUTER METHODS IN THE HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the use of computational modeling and programming to conduct the text-based research in the humanities. Course goals include 1) learning how to identify research questions in the humanities that are amenable to computational systems to explore those questions.

No prior programming experience or knowledge of foreign languages required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

CLASS 1060 - GREEK AND LATIN ELEMENTS IN ENGLISH

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the semantic elements which have come into English from the classical languages, Greek and Latin. In addition, it provides a general introduction to the history of English and its relationship to other Indo-European languages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CLASS 1130 - CLASSICAL MYTHOLOGY AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course examines how authors of classical antiquity used the traditional figures and stories of their culture's mythology as material for works of literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

CLASS 1140 - GREEK TRAGEDY

Minimum Credits: 3
Maximum Credits: 3
Study of representative plays by the three great tragic dramatists of ancient Greece; Aeschylus, Sophocles, and Euripides. All readings are in English translation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

CLASS 1142 - ANCIENT EPIC

Minimum Credits: 3
Maximum Credits: 3
Study of selected Greek and Roman epics in English translation. Among the works that may be read are Homer's Iliad and Odyssey, Apollonius' Argonautica, Virgil's Aeneid, and Ovid's metamorphoses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

CLASS 1144 - GREEK AND ROMAN LYRIC POETRY

Minimum Credits: 3
Maximum Credits: 3
Study of selected poems and fragments of the Greek and Roman lyric poets in English translation. Among the poets that may be read are Archilochus, Sappho, Pindar, Catullus, and Horace.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

CLASS 1151 - DEATH IN THE MEDITERRANEAN WORLD

Minimum Credits: 3
Maximum Credits: 3
In many cultures, people sometimes ask fundamental questions about their existence, including, "what happens after we die?" This course will focus on the evolution of beliefs and rituals related to death and the afterlife in and around the ancient Mediterranean basin, including egyptian, greek, etruscan, and roman cultures. Using an interdisciplinary approach, we will combine methodologies from anthropology, classics, history, and religious studies. Topics to be covered include myths of the afterlife, books of the dead, magic and death rituals, funeral practices and paraphernalia (disposal of the dead), cults of the dead, divinization, heaven and hell, judgment, and the impact of christianization on the ancient understanding of death.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

CLASS 1164 - GREEK TRAGEDIES AND MODERN RESPONSES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

CLASS 1210 - GREEK HISTORY

Minimum Credits: 3
Maximum Credits: 3
A survey of the history of ancient Greece, with special emphasis on political and social developments during the fifth century B.C.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

CLASS 1216 - ALEXANDER AND THE HELLENISTIC AGE

Minimum Credits: 3
Maximum Credits: 3
This course deals both with the career of Alexander the Great and with political, social, and intellectual developments in the several successor states into which Alexander's empire dissolved after his death.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

CLASS 1220 - ROMAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
A survey of the history of Rome from the earliest times through the late empire, with particular emphasis on political and social developments during the late republic and early empire.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

CLASS 1240 - FROM PANDORA TO PSYCHOPATHY: CONCEPTIONS OF EVIL FROM ANTIQUITY TO THE PRESENT

Minimum Credits: 3
Maximum Credits: 3
This lecture course introduces students to the ways in which humanity has struggled to comprehend and explain the existence of evil. The focus lies not on natural evils (such as earthquakes and epidemics) but on moral evil: Why are human beings at time so manifestly wicked? In this course we will look at the many theories and explanations given by poets, philosophers, and theologians over the course of our intellectual history and critically examine their explanatory value as well as their unintended consequences. The course is highly interdisciplinary. It will take into account the literature of various periods, beginning from early bronze age to the 21st century, but also invite students to engage with texts from such different genres as poetry, ancient and modern philosophy, theology, and modern psychology. The aim of the class is to empower students better to evaluate and critique facile contemporary views and prejudices concerning the nature and origin of moral evil.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CLASS 1250 - LAW & SOCIETY IN GREECE & ROME

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course examines the legal systems of ancient Greece and Rome with particular attention to interrelations with contemporary society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

CLASS 1312 - PLATO

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course examining Plato's main views both in their historical context, and as they influence our own thinking today; the relations between Socrates and the sophists are also studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CLASS 0300 or PHIL 0200
Course Attributes: West European Studies

CLASS 1314 - ARISTOTLE

Minimum Credits: 3
Maximum Credits: 3
This course will examine the basic concepts of Aristotle's metaphysics, physics, ethics, and logic.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req.

CLASS 1390 - TOPICS IN ANCIENT PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
Study of selected topics in ancient philosophy. All readings are in English translation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CLASS 1402 - GRECO-ROMAN RELIGIONS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to religious texts and traditions in a formative era of Western civilization and culture. Our focus will be on the variety of religious expression in Greco-Roman culture, which flourished in the geographical area of the Mediterranean basin during the first five centuries

of the common era. By considering such topics as debates about the nature of the gods and access to them (through oracles, ritual and magic), the emergence of the idea of the holy person, and a variety of religious traditions as expressed in prayer, ritual and art, students will encounter a rich religious imagination that is truly different from contemporary understandings of religion and yet strangely familiar as well. We will also explore the complete integration between religion politics in the ancient world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

CLASS 1430 - ORIGINS OF CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course presents a historical-critical investigation of Christian origins. Special attention is paid to varieties of 1st century Hellenistic and Palestinian Judaism within the Greco-Roman world. Primary readings include selected Biblical passages and apocrypha, 1st century historians and philosophers (Josephus, Tacitus, Suetonius, and Philo), the New Testament corpus (including Paul and the Pastorals), and selected readings from the Dead Sea Scrolls. In addition there will be assignments from various modern New Testament critics, historians, and theologians.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

CLASS 1432 - VARIETIES OF EARLY CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
An examination of the diverse strands of Christianity as developed both in the Christian bible and outside of it.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

CLASS 1510 - GREEK ART

Minimum Credits: 3
Maximum Credits: 3
The study of Greek art begins ca. 3000 B.C. In the so-called "age of bronze" and traditionally ends in 30 B.C. With the completion of the roman conquest of the eastern Mediterranean. The course will trace the development of architecture, sculpture and painting in mainland Greece and to a lesser extent in the Greek colonies of Asia minor and Italy, emphasizing the changes in style and taste which took place over this period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

CLASS 1520 - ROMAN ART

Minimum Credits: 3
Maximum Credits: 3
Roman art served as the funnel through which the principles of Greek art passed into European culture, but the principles were transformed in the process of transmission. The course will trace the beginnings and subsequent development of the arts of painting, sculpture, and architecture in Italy from the period of the kings, and the middle years of the empire (ca. 150 A.D.).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

CLASS 1524 - ROMAN ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
The course will examine the development of Roman architecture from its origins in Etruria and central Italy to the middle empire (ca. 150 A.D.). Special attention will be given to the relationship of architectural forms, types and functions to changes in Roman politics and society and the significance of materials and outside influences on the development of local Italian traditions and forms. The interaction between roman architectural forms and local traditions in the provinces to create a Roman imperial "koine", will be treated only in passing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

CLASS 1610 - GREEK ARCHAEOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the archaeologist's task of bringing lost societies back to light through the study of their physical remains and material culture. By examining ancient Greek art, architecture, inscriptions, burials, coins, and the many everyday objects that survive from antiquity, archaeologists are able to shine light on details of Greek society that are often totally inaccessible from the surviving literary and historiographical record. The course begins with an examination of the archaeology of the bronze age, and presents a survey of the archaic, classical, and Hellenistic periods, as well as a history of the archaeological discipline itself from the nineteenth century to today.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

CLASS 1630 - MARGINALITY IN THE ANCIENT GREEK WORLD

Minimum Credits: 3
Maximum Credits: 3
This undergraduate course surveys the literary and material evidence of marginality in the ancient Greek world. This course includes an introduction to Greek culture, a discussion of common terms associated with marginality. Different groups who were marginalized, such as those of low socioeconomic status, those of differing ethnicity and race, the disabled and deformed, the mentally ill, slaves and other marginalized individuals will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements

CLASS 1640 - THINK LIKE A ROMAN

Minimum Credits: 3
Maximum Credits: 3
The course explores the ancient world through the lens of cognition, examining a variety of socio-historical topics, like emotion, spatial and temporal perception, color cognition, and memory and mnemotechnics, as viewed through ancient literature and modern research in cognitive psychology. Through written assignments and group discussion, students practice interpreting psychological research and Classics scholarship that looks at ancient texts through the lens of cognitive science. In addition to studying ancient cognition, students reflect on their own learning, while engaging with research on metacognition to develop evidence-based practices for improving their writing and study habits. This course is designated as a Writing Intensive course, and students will conduct an independent research project that applies cognitive methods to ancient literature, history, or art.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*

CLASS 1650 - WARFARE: ANCIENT MEDITERRANEAN

Minimum Credits: 3
Maximum Credits: 3
Since the dawn of civilization, warfare has been a constant threat to society. Although the material remains of ancient warfare survive in the archaeological record, the literary accounts of Greco-Roman authors provide us with additional evidence to reconstruct developments in, and attitudes toward, armed conflict in the ancient Mediterranean region. This undergraduate course surveys the literary and material evidence of Greco-Roman warfare. Significant battles, developments, strategies, and attitudes are presented chronologically, and special attention is paid to issues of biological and chemical warfare, votive dedications and war trophies, casualties and commemoration, civilian impact, and the effects of post-

traumatic stress disorder. This class is a designated W-course, so considerable attention will be paid to developing critical reading, writing, and oral presentation skills.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Writing Requirement Course

CLASS 1710 - SANSKRIT 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to the basic structure and vocabulary of Sanskrit. Approximately half of the course is devoted to an intensive survey of Sanskrit grammar and half to the reading of a selection from the Mahabharata.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

CLASS 1720 - SANSKRIT 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of Sanskrit 1, this course is devoted to the reading of selected Sanskrit texts. Grammar presented in Sanskrit 1 is reviewed as necessary and some additional grammatical material is introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

CLASS 1900 - INTERSHIP IN CLASSICS

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

CLASS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
In this course a student undertakes independent study in the field of classical civilization in consultation with a member of the faculty.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

CLASS 1902 - DIRECTED STUDY FOR UNDERGRADS

Minimum Credits: 1
Maximum Credits: 9
In this course a student undertakes directed study in the field of classical civilization under the close guidance of a member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

CLASS 1903 - DIRECTED RESEARCH FOR UNDERGRADS

Minimum Credits: 1
Maximum Credits: 9
In this course a student undertakes directed research in the field of classical civilization under the close guidance of a member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

CLASS 1904 - UNDERGRADUATE RESEARCH ASSISTANT

Minimum Credits: 1
Maximum Credits: 3
This course enables advanced majors to receive academic credit for serving as assistants to faculty members who are conducting research projects (e.g., compiling bibliography for a new class, preparing a work for publication, creating a conference presentation). This collaborative project will result in a meaningful experience that will provide the student with a foundation in the mechanics of research and publication. Given the variable aspects of this learning experience, there is not official syllabus. However, students and faculty who participate in this course are required to submit a signed contract prior to the start of the semester in which the assistantship will occur. This contract is subject to the approval of the undergraduate committee.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

CLASS 1908 - DIRECTED WRITING FOR MAJORS

Minimum Credits: 1
Maximum Credits: 1
In addition to whatever written assignments are required of those enrolled in the course, this directed writing-practicum provides students with an opportunity to contribute writing designed in terms of the intellectual strategies of the course.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

CLASS 1990 - UNDERGRADUATE TEACHING ASSISTANTSHIPS IN CLASSICS

Minimum Credits: 1
Maximum Credits: 5
This course allows students to earn credits for serving as undergraduate teaching assistants in courses listed under the 'classics' subject code. Admission requires permission of the department chair. Students may repeat for credit.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

Co-Ed Physical Education

PEDC 0001 - BEGINNING SWIMMING

Minimum Credits: 1
Maximum Credits: 1
For students who are unable to swim or who can swim very little. Opportunities are presented to learn basic functional aquatic skills and basic strokes. Students are permitted to set their own achievement goals. Instruction is on an individual basis.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0002 - INTERMEDIATE SWIMMING

Minimum Credits: 1
Maximum Credits: 1

For students who have learned the mechanics of basic aquatic strokes and are interested in the development of proper rhythm and timing necessary for good performance in swimming. Students are permitted to set their own achievement goals. Instruction is on an individual basis.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0010 - WATER AEROBICS

Minimum Credits: 1
Maximum Credits: 1
Improve your fitness in the enjoyable aquatic environment. This program is designed for all ages. Each enrollee will be permitted to participate at their own level gradually improving their muscle tone, cardiac, and respiratory fitness levels. This program will be conducted in shallow water so that the non-swimmer may participate.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0022 - AEROBIC DANCE

Minimum Credits: 1
Maximum Credits: 1
Improve your fitness levels with this aerobic dance to music course. One of America's most popular ways to exercise. This program is for all ages. Each enrollee will be permitted to participate at his/her own level, gradually improving muscle tone, cardiac, and respiratory fitness.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0023 - WEIGHT TRAINING

Minimum Credits: 1
Maximum Credits: 1
A coeducational class designed to provide the student with the opportunity to develop and practice basic weight training techniques. With the guidance of the instructor, the student will be encouraged to develop an individualized self-designed program. The emphasis of this course will be placed on progressive-resistive exercises.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0025 - AEROBICS-CROSS COUNTRY RUNNING

Minimum Credits: 1
Maximum Credits: 1
Primarily involves a training program of light to moderate intensity with increased cardiovascular fitness and improved quality of life as a goal. In support of the instruction on cross-country running, students will receive some background information on aerobics in the form of handouts and mini lectures.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0026 - AQUATIC CONDITIONING

Minimum Credits: 1
Maximum Credits: 1
Good swimmers who want to learn how to use swimming to maintain or improve their physical fitness should register for this course. Students may determine their capacity for exercise, and they may learn how to apply this effort in the water.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0031 - MODERN DANCE 1

Minimum Credits: 1
Maximum Credits: 1
Introduces the college student to modern dance as a point of view, rather than a particular technique. There will be exercises to increase strength, and flexibility, as well as to teach techniques of movement, exploration and improvisation. Emphasis is on developing a sensitive awareness of one's own body movement in time and space.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0032 - MODERN DANCE 2

Minimum Credits: 1
Maximum Credits: 1
This course is designed for those students who have mastered beginning dance technique and wish to gain more advanced skills. Advanced technique and compositional work is stressed. Course objectives include increased technical skills, awareness and appreciation of modern dance as an art form, ease in phrasing rhythmical movement and skill in improvisational movement.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0033 - BALLET 1

Minimum Credits: 1
Maximum Credits: 1
For absolute beginners introducing them to basic fundamentals of the classic ballet technique.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0034 - BALLET 2

Minimum Credits: 1
Maximum Credits: 1
An intermediate class, taught as a continuation of ballet 1. Also a class for students who may have some ballet training before coming to college. Audition for class eligibility at the first class session or permission of instructor.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0040 - CHOREOGRAPHY

Minimum Credits: 1
Maximum Credits: 1
The art of making dances. Studies dealing with timing, grouping, energy, quality, etc., Lead to the creation of dances. Designed for students who wish to explore the creative process or for those wanting more advanced dance training.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0041 - JAZZ 1

Minimum Credits: 1
Maximum Credits: 1
Fundamentals of jazz dance for beginning dance students. Class includes warm-up, center floor, and cross floor movement combinations, contemporary jazz and pop music is emphasized.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0042 - JAZZ 2

Minimum Credits: 1
Maximum Credits: 1
A continuation of the basic fundamentals learned in jazz 1. More emphasis is placed on longer routines and more complicated movement sequences. It is an intermediate jazz class.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0044 - DANCE PRODUCTION

Minimum Credits: 2
Maximum Credits: 2
This course is designed to familiarize students with both the technical and production aspects of dance and to increase appreciation of dance in all its forms.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

PEDC 0048 - RACQUETBALL 1

Minimum Credits: 1
Maximum Credits: 1
This course is designed to introduce the beginner to the significant components of racquetball. Three types of racquetball games, singles, doubles, and cut throat, will be introduced in conjunction with individual skill development. The grip, ready position, racquet swing, service, return of service, and shot making will be covered. Game strategies and rules and regulations will be reviewed.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0049 - BADMINTON

Minimum Credits: 1
Maximum Credits: 1
This course is designed to introduce the beginner to the significant components of badminton. The following basic strokes will be presented in class; forehand and backhand, overhead clear, high singles service, low doubles service, smash and drop. Rules and regulations and strategies for doubles and singles games will be presented.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0050 - RACQUETBALL 2

Minimum Credits: 1
Maximum Credits: 1
This course provides basic stroke mechanics, practice drills, and winning strategies for advanced players with a knowledge of the game of racquetball. Class time will deal in depth with the drive, lob, overhead z-serves, serve returns, back wall play, and training aids. Developing strategies for winning in singles and doubles will be dealt with extensively in class.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0065 - VOLLEYBALL

Minimum Credits: 1
Maximum Credits: 1
This course is designed to introduce the beginner to the significant components of volleyball. Basic skills to be taught will include the overhead volley, forearm pass, service, spike, individual block and defensive recovery skills. A 4-2 right-side-setter offensive system will be introduced with a 6-back and a 6-up defensive system. All rules and regulations will be reviewed during the course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0068 - JUDO 1

Minimum Credits: 1
Maximum Credits: 1
An intensive study of the basic physics and principles governing the art of judo. It is no longer an oriental mystique. Today, judo is practiced worldwide by men and women of all ages. The "judoka" (student) will acquire confidence as well as improved physical endurance. In addition to this, the student will begin to grasp the true meaning of judo and find how it can apply to life in general. Judo gi is required.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0069 - JUDO 2

Minimum Credits: 1
Maximum Credits: 1
A continuation of Judo 1 including mat techniques such as strangle, joint lock, and pinning. New students must have a yellow belt.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0087 - PERSONAL DEFENSE

Minimum Credits: 1
Maximum Credits: 1
Offers physical conditioning and self-defense through the application of judo. Emergency self-defense from various attacks will be taught utilizing basic throwing, grappling, and striking techniques. Students develop a deep respect for others, inner security, and self-confidence. The purpose of this course is to defeat an opponent through the most efficient use of mind and body, but doing so on the principle of "giving away" under his attack or effort.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0090 - VARSITY SPORTS 1

Minimum Credits: 1
Maximum Credits: 1
Students may earn four credits in physical education by participating in a varsity sport. One credit only per term. Student must be a varsity athlete.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: STDNT GRP: Student Athlete or Cheer / Dance
Course Attributes: UPB Physical Education General Ed. Requirement

PEDC 0091 - VARSITY SPORTS 2

Minimum Credits: 1
Maximum Credits: 1
Students may earn one credit in physical education by participation in a varsity sport for his/her second term.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PREQ: PEDC 0090; STDNT GRP: Student Athlete or Cheer / Dance

PEDC 0099 - BASIC ROCK CLIMBING

Minimum Credits: 1
Maximum Credits: 1
Beginning with bouldering, the course will deal primarily with rope handling and moving on vertical rock planes in a safe manner. Covered in this course are bouldering, friction and balance climbing, 3-point suspension, use of ropes, knot craft, body rappelling, free rigging climbs, mountain safety, basic belaying, use of webbing (slings and harnesses), chimney techniques and natural protection.
Academic Career: Undergraduate

Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0133 - LIFE GUARDING 1

Minimum Credits: 1
Maximum Credits: 1
For the intermediate level or above swimmer who wishes to gain national red cross lifeguard certification. Training is specifically designed to prepare enrollers for lifeguarding pools and openwater beaches. Advanced lifesaving, community first aid, and CPR certifications are required if not already obtained before course completion.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0135 - BASKETBALL 1 - CO-EDUCATIONAL

Minimum Credits: 1
Maximum Credits: 1
Supervised competition follows a conditioning period in which individual skills and team strategy are stressed. Opportunity to improve on previously acquired skills and become a team member is provided.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0146 - FIRST AID AND CPR

Minimum Credits: 1
Maximum Credits: 1
A laboratory-lecture course in which American red cross techniques of cardiopulmonary resuscitation (CPR) and standard first aid are presented. All students who meet the American red cross standards will receive American red cross certification.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0147 - WATER SAFETY INSTRUCTOR

Minimum Credits: 2
Maximum Credits: 2
The water safety instructor course is designed to earn certification to teach American red cross swimming and water safety courses. The course focuses on planning, organizing, sequencing, skill development, and red cross operational policies and procedures.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0153 - VARSITY SPORTS 3

Minimum Credits: 1
Maximum Credits: 1
Students may earn one credit in physical education by participation in a varsity sport for his/her third term.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PREQ: PEDC 0091; STDNT GRP: Student Athlete or Cheer / Dance

PEDC 0154 - VARSITY SPORTS 4

Minimum Credits: 1
Maximum Credits: 1
Students may earn one credit in physical education by participation in a varsity sport for his/her fourth term.
Academic Career: Undergraduate
Course Component: Credit Laboratory

Grade Component: Letter Grade
Course Requirements: PREQ: PEDC 0153; STDNT GRP: Student Athlete or Cheer / Dance

PEDC 0158 - WEIGHT TRAINING - BEGINNER

Minimum Credits: 1
Maximum Credits: 1
A coeducational class designed to provide the student with the opportunity to develop and practice basic weight training techniques. With the guidance of the instructor, the student will be encouraged to develop an individualized self-designed program. The emphasis of this course will be placed on progressive-resistive exercises.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0162 - DANCE BASICS

Minimum Credits: 1
Maximum Credits: 1
For those people who always had a desire to learn to dance but were intimidated by a formal class. Break your own stereotype! If increasing your flexibility, strength, coordination and rhythmic awareness is a goal, you can do it in an enjoyable atmosphere of sound and movement. Learn dance fundamentals that are used in ballet, jazz, and modern dance. Some social dance and folk dance movements are included. Barre and floor warm-up and movement sequences are contained in each class.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PEDC 0164 - PARTY DANCE

Minimum Credits: 1
Maximum Credits: 1
This class will focus on generic dance movements that you can use in social dance situations. Hip-hop, line dances like electric slide and achey-breaky, and free form styles will be highlighted. Understanding rhythm and moving rhythmically will also be included. Learn how to learn dance so you can feel confident at weddings, house parties and clubs. This is strictly for non-dancers that want to become dance confident.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0171 - FITNESS KICK BOXING

Minimum Credits: 1
Maximum Credits: 1
Our exercise program is based on the concepts of boxing, karate, muay thai kick boxing, and total fitness accompanied by rhythmatic music. Conditioning is focused on the areas of endurance, strength, and flexibility; all of which can bring about positive physical changes in participating students. Aerobic and anaerobic power training with speed bay and heavy bag is part of the training module.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0175 - AEROBIC FITNESS BOXING

Minimum Credits: 1
Maximum Credits: 1
Our exercise program is based on the concepts of boxing, karate, muay thai kick boxing, and total fitness accompanied by rhythmatic music. Conditioning is focused on the areas of endurance, strength, and flexibility; all of which can bring about positive physical changes in participating students. Aerobic and power training are a part of the enduring comprehensive training module.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0177 - WEIGHT TRAINING - INTERMEDIATE/ADVANCED

Minimum Credits: 1
Maximum Credits: 1
A class designed for the student who is engages in resistance exercise and is interested in advancing their weight training techniques. With the guidance of the instructor, the student will engage in an individualized self-designed intermediate-to-advance resistance training program. The emphasis of this course is placed on progressive-resistive exercises, and is designed for the intermediate/advanced-level weight training exerciser.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0180 - VOLLEYBALL 1

Minimum Credits: 1
Maximum Credits: 1
This course is designed to introduce the beginner to the significant components of volleyball. Basic skills to be taught will include the overhead volley, forearm pass, service spike, individual block and defensive recovery skills. A 4-2 right-side-setter offensive system will be introduced with a 6-back and a 6-up defensive system. All rules and regulations will be reviewed during the course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0187 - HIIT & CONDITIONING: AN INTRO COURSE TO APPLY HIIT & OTHER CONDITIONING PRINCIPALS

Minimum Credits: 1
Maximum Credits: 1
An introductory course to apply HIIT (high-intensity interval training) and other conditioning principals to enhance physical fitness. HIIT is a form of interval training that alternates short periods of intense anaerobic exercise with less intense recovery periods. This course will also include other conditioning opportunities to enhance total physical fitness.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0188 - PADDLE BOARD YOGA

Minimum Credits: 1
Maximum Credits: 1
An introductory course on the practice and theory of the basic principles of paddle board yoga. This includes learning basic paddle boarding skills to allow for performance of yoga-based exercise while on the paddle board that progresses to the water in a pool. This unique class will provide students with a plan to focus on their particular bodies' strengths and weaknesses plus increase flexibility.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0193 - PERSONAL FITNESS

Minimum Credits: 1
Maximum Credits: 1
An organized approach to health related fitness with diagnostic and prescriptive assessment. The emphasis is on an individual, self-designed program based on scientific principles with the goal of personal improvement and fitness knowledge of primary importance. Various types of exercise will be incorporated into class times.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0194 - SPORTS CONDITIONING

Minimum Credits: 1
Maximum Credits: 1
This course includes sport specific training for a multitude of sports including plyometric, speed and agility training, resistance training and will incorporate different modes of aerobic training. This course focuses on how to train different types of athletes and how each specific type of training is related to the sport/event involved. This is a high intensity exercise course and should not be taken if the student is not apparently healthy and has not already had at least some experience in sport and/or fitness related fields.

Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0196 - FIRST AID AND CPR

Minimum Credits: 2
Maximum Credits: 2
A 2-credit lab/lecture discussion course in which American red cross techniques of cardiopulmonary resuscitation (CPR) for the professional rescuer and community first aid and safety are presented. In addition to these skills, current methods of management and treatment of emergency illnesses and injuries are also taught. American red cross certification available to all students who meet the standards.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0197 - BOOTCAMP FITNESS

Minimum Credits: 1
Maximum Credits: 1
If you want to increase your fitness level, burn fat, look great and feel fantastic, then take your workout to the next level in boot camp fitness! A typical class will include cardio exercise such as jump rope, jumping jacks, jogging as well as muscular endurance exercises such as push-ups, squats, lunges, etc. Everyone will be encouraged to excel to their very best but will not be pushed to the point of injury or pain. All exercises can be modified to suit each participant's needs.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0206 - BODY SCULPTING 1

Minimum Credits: 1
Maximum Credits: 1
Exercise to music in this non-impact class designed to develop muscular definition, firming, toning, and strength. Weights and other resistive devices will be incorporated into workout routines.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0207 - PILATES

Minimum Credits: 1
Maximum Credits: 1
The pilates method of body conditioning strengthens and tones muscles, improves posture, provides flexibility and balance, unites body and mind, and creates a more stream lined shape. Pilates is great for people of all ages and fitness levels, as it uses your body's own natural resistance to define and elongate the muscles.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0209 - "ON THE BALL"

Minimum Credits: 1
Maximum Credits: 1
A 60 minute resistance training workout using stability balls, hand weights, and resistance tubing. This class will focus on increasing core strength, as well as overall muscle tone, balance, and coordination. A nice compliment to your cardio workout!
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0211 - WATER FITNESS

Minimum Credits: 1
Maximum Credits: 1
Improve your fitness in an enjoyable environment! This program is designed for all ages allowing the student to participate at his or her own level. Students will gradually improve muscle tone and cardiac fitness levels. The program is conducted in shallow water so that non-swimmers may participate.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0222 - CYCLE EXERCISE

Minimum Credits: 1
Maximum Credits: 1
This class if for anyone that wants a killer cardiovascular workout without being bored on a traditional cardio machine. Spinning bikes simulate an outside ride by allowing you to change positions on the bike as well as resistance to simulate hills. This class will incorporate sprints, seated climbs, standing climbs, jumps and more for an anything-but-boring workout! During the class, you can work at your own intensity level whether it is light to moderate or vigorous. Spinning is great for anyone and everyone including cyclists as well as those of you that aren't the best of cyclists. No bike riding experience is necessary for this class.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0225 - BUDO

Minimum Credits: 1
Maximum Credits: 1
An overview of martial arts which combines the practice of kobudo, ancient weaponry-bo (long stick), jo (short stick), sia, aiki, sumo jujitsu & karate do. Class will incorporate the use of ancient weaponry and the art of ju-jitsu, which is composed of falling, throwing, pressure points, disarming skills against the weapon, the art of restraining, and ground grappling. This course will cover the history and philosophy of these activities and also physically using tactical application. Budo will provide student insight on how different disciplines are combined and used.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0226 - FITNESS BOXING 1

Minimum Credits: 1
Maximum Credits: 1
For students who want a high level of fitness achieved through learning various beginning, non-contact boxing skills and techniques. Skills include: shadow boxing, defensive techniques, non-contact sparring, heavy bag workout, speed bag techniques, rope jumping, and strength and conditioning exercises.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0231 - SOCCER 1

Minimum Credits: 1
Maximum Credits: 1
For the beginner who wishes to develop competence in the skills, rules, and strategies required for participation in soccer.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0232 - TOUCH FOOTBALL 1

Minimum Credits: 1
Maximum Credits: 1
A co-educational course designed to provide the student with an opportunity to develop the fundamental skills of football, along with experimenting with organized competition in touch football games.
Academic Career: Undergraduate

Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0236 - AEROBIC MIX

Minimum Credits: 1
Maximum Credits: 1
This is a great class for anyone who loves variety! This course provides a mixture of various types of cardiovascular exercise including, but not limited to, hi-lo floor aerobics, step aerobics and cardio kickboxing. In addition, resistance training, yoga and/or pilates may be incorporated into the exercise sessions. Classes will vary at the instructor's discretion.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0237 - AEROBIC EXERCISE

Minimum Credits: 1
Maximum Credits: 1
This class is for those who prefer floor aerobics to step aerobics. The class will include predominantly hi-lo floor aerobics. Other forms of exercise may include resistance training, yoga and pilates.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0242 - AMER RED CROSS LIFEGUARD INSTRC

Minimum Credits: 2
Maximum Credits: 2
American red cross lifeguard training for instructors will certify the student to teach various components of American red cross classes, i.e. Lifeguard training, adult and child, CPR for the professional rescuer, and community first aid and safety classes. This certification enables students to teach the above mentioned classes in any state authorized by the American red cross.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0243 - AMER RED CROSS FIRST/CPR INSTRC

Minimum Credits: 2
Maximum Credits: 2
American red cross standard first aid and CPR for instructors will certify the student to teach various components of American red cross classes, i.e. Adult, infant and child, and CPR for the professional rescuer, as well as community first aid and safety classes. This certification enables students to teach the above mentioned classes in any state authorized by the American red cross.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0244 - DANCE PRODUCTION 2

Minimum Credits: 2
Maximum Credits: 2
This course is designed to familiarize students with both the technical and production aspects of dance in all its forms. The students will have experiences with lighting, costume, choreography, public relations, and stage management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PEDC 0246 - POOL OPERATIONS/EVENT MANAGEMENT

Minimum Credits: 1
Maximum Credits: 3
Course will cover all aspects of pool operations including safety requirements, scheduling, emergency action plan, lifeguard rotations and filtration.

Section on event management will include scheduling, set up and break down of competition pool including lane ropes, touchpads, flags, blocks, and timing system. Attendance at pre-determined pool events will be required. Total number of credits earn ed will be based on minimum number of hours worked.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0262 - YOGA 1

Minimum Credits: 1
Maximum Credits: 1
An elementary course on the practice and theory of the basic principles of yoga. This class will provide students with a plan to focus on their particular bodies' strengths and weaknesses plus increase flexibility.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0263 - YOGA 2

Minimum Credits: 1
Maximum Credits: 1
An intermediate level course on the theory of basic principles of yoga.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0266 - PILATES FUSION

Minimum Credits: 1
Maximum Credits: 1
Pilates fusion is based on the Pilates system, but is more movement centered, as we transition from one form to the next through movement stretches taken from release methods. These release methods are designed to lengthen and to soften the muscles. The movements are constant, so there is flow and connection rather than a static approach. There is a focus on proper form, finding center through the pelvis, core strengthening and its relation to the back. Techniques from yoga practice are also incorporated into this class.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0267 - BEGINNING KARATE

Minimum Credits: 1
Maximum Credits: 1
An introduction on the principles and techniques of traditional shotokan karate. Students will begin training with physical conditioning and basic blocking, striking, punching, and kicking techniques.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0287 - PERSONAL DEFENSE 1

Minimum Credits: 1
Maximum Credits: 1
The purpose of this course is to teach students how to defeat an opponent through the most efficient use of mind and body, but doing so on the principle of "giving away" under his/her attack or effort. Emergency self-defense from various attacks will be taught utilizing basic judo techniques and the "byam" method.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0340 - KETTLE BELL AND CONDITIONING

Minimum Credits: 1
Maximum Credits: 1
This class is designed to provide the student with a total body strength and cardiovascular workout utilizing kettle bell equipment and various strength conditioning techniques. Emphasis is on circuit style or continuous training with the goal of progressively increasing the intensity and difficulty of the workout throughout the semester.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0361 - FITNESS DANCE

Minimum Credits: 1
Maximum Credits: 1
This class, set to contemporary music, is designed to get your moving while learning fun and exciting dance movements! The class begins with a warm-up consisting of fundamental dance principles and techniques that will prepare you to move into dance phrases and choreographed movement. The class cools down with a series of stretches and muscle relaxing exercises. No previous dance training is required.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0362 - TOTAL BODY FUSION

Minimum Credits: 1
Maximum Credits: 1
This class is for anyone looking to increase cardiovascular fitness, firm and tone muscles, increase flexibility and de-stress. A typical class starts with cardiovascular exercise such as step aerobics, kickboxing and/or hi-lo aerobics, moves to body sculpting using free weights, bands and balls and finishes up with core work and stretching exercises. If you like a little of everything, this is definitely the class for you!
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0363 - ZUMBA

Minimum Credits: 1
Maximum Credits: 1
Zumba is a one of kind combination of dance and exercise, designed to put "Fun" back into fitness. The zumba workout maximizes caloric output, fat burning, and total body toning. The routines feature aerobic interval training with a combination of fast and slow rhythms that tone and sculpt the body. Exotic and explosive Latin rhythms create a party like atmosphere that delivers results, as well as a "Feel happy" workout. No previous experience in dance is needed to have fun with zumba.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 0367 - BALLROOM 1

Minimum Credits: 1
Maximum Credits: 1
Beginners course: professional instruction in the smooth dances: waltz, fox-trot, tango and Viennese and Latin dances, cha cha, rumba, samba, mambo, etc.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0368 - LATIN RHYTHM AND SWING

Minimum Credits: 1
Maximum Credits: 1
Call it mambo, call it rock-n-roll.....Beginner, learn the basic footwork, turns and combination figures to these fiery dances. Learn to lead a partner. And partner, learn to follow the leader. Leading and following emphasized. Floor craft and dance etiquette will be taught. Styling and technique added to complete all dances. Also, special attention to timing and music recognition.
Academic Career: Undergraduate

Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 0380 - CARDIO PILATES

Minimum Credits: 1
Maximum Credits: 1
This class begins with aerobic exercise of various formats including: hi-lo, step and kickboxing to get your heart rate elevated and body moving. It then progresses to a short cool-down period and finishes with pilates mat exercises to sculpt your muscles and stretch your body. This class is great for anyone looking to increase cardiovascular fitness as well as strengthen, stretch and tone the muscles.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 1002 - TAE KWON DO 1

Minimum Credits: 1
Maximum Credits: 1
An ancient Korean martial art that is a free-fighting, self-defense sport in which the athlete's entire body is a weapon. Tae kwon do requires physical training, coordination, and a high degree of mental discipline.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 1003 - TAE KWON DO 2

Minimum Credits: 1
Maximum Credits: 1
A continuation for students in Tae Kwan Do 1. Learn to compete olympic style. Competition and advanced style defense techniques will be taught. New students must have a yellow belt.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 1006 - JIU JITSU

Minimum Credits: 1
Maximum Credits: 1
Jiu jitsu is a method of defense without weapons using hand, foot, and hip techniques combined with grappling and choke holds designed to render your attacker helpless and to help you gain more self-confidence. Jiu jitsu is not a contest of muscular strength. When practiced properly a smaller person can easily defend themselves against a larger person.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

PEDC 1141 - FITNESS FOR INSTRUCTORS

Minimum Credits: 2
Maximum Credits: 2
Fitness for instructors will teach the student the major elements of fitness. How to assess fitness levels, deter mine fitness goals, design fitness programs and facilities. The course will be a combination of classroom, exercise, and practical experiences.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 1211 - ATHLETIC INJURY PREVENTION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide the student with an introduction to the athletic training profession. Topics include medical terminology, mechanisms of injury, and recognition and treatment of common athletic injuries to major body parts.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: PEDC 1212

PEDC 1212 - ATHLETIC INJURY PREVENTION LAB

Minimum Credits: 1
Maximum Credits: 1
An introduction to basic taping techniques and injury evaluation techniques used in the profession of athletic training. Basic supportive strappings and paddings for immediate care and competition are presented as well as basic joint evaluation procedures, massage, and crutch fitting.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: CREQ: PEDC 1211

PEDC 1233 - PRIN OF STRENGTH AND CONDITIONING

Minimum Credits: 2
Maximum Credits: 2
Instruction is provided describing the principles for development of pre-season, in-season and off-season strength and conditioning programs. Laboratory experiences will include the theory and techniques of operating strength training equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

PEDC 1300 - NUTRITION IN EXERCISE AND SPORT

Minimum Credits: 1
Maximum Credits: 1
This course will provide the student with basic nutritional information as it pertains to sport and exercise performance. Topics of discussion include weight reduction and management, nutritional requirements for athletic performance and maintenance of a healthy lifestyle, proper eating habits, diet fads, disordered eating, and supplementation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PEDC 1488 - WEIGHT MANAGEMENT AND PHYSICAL ACTIVITY

Minimum Credits: 2
Maximum Credits: 2
This course is designed for students who meet the clinical criteria for being overweight (body mass index > 25 kg/m2) and who desire to lose weight, improve their nutrition, and increase their exercise. This course will combine instruction on behavioral techniques to lose and maintain weight loss along with supervised cardiovascular and resistance exercise. Students will be assessed at the beginning and end of the course to monitor changes in weight, body composition, fitness and other factors.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

College of General Studies

CGS 0092 - MASTERING THE UNIVERSITY: ACADEMIC AND CAREER EXPLORATION 1

Minimum Credits: 1
Maximum Credits: 1
This course is the first of a two course series aimed at helping students develop both academically and professionally. In this first course, students will explore strategies, techniques, and processes aimed at improving their critical thinking and communication skills, which ultimately will serve them well in both academic and professional environments. Additionally, students will examine elements of university culture and university policies with the aim of providing them with perspectives that can enhance their academic success and build their on-campus network. Ideal for transfer students and anyone looking to boost their academic performance.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Satisfactory/No Credit

CGS 0093 - FROM CLASSROOM TO CAREER: ACADEMIC AND CAREER EXPLORATION 2

Minimum Credits: 1
Maximum Credits: 1
As the second course of a two course series on academic and professional development, this course asks students to further examine the ways that their academic plans and career goals align. Students will identify their current competencies and those they still need to acquire in order to succeed in identified careers. Building on their new understanding of their competencies and interests, students will develop strategies to reach their identified career goals, such as obtaining the internships, informational interviews, and job shadowing experiences necessary to attract prospective career opportunities and build their professional network. Ideal for career launchers and career changers, no prerequisites needed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

CGS 0095 - CAPSTONE COURSE: IMPLEMENTING YOUR CAREER PLAN

Minimum Credits: 1
Maximum Credits: 1
This is primarily an on-line course, requiring weekly on-line participation, in addition to three in-person workshops. This course will provide students the opportunity to connect their academic competencies with their career goals. Students will utilize professional communication skills in order to effectively position themselves for appropriate career opportunities. Students will master career development techniques such as: practicing interviewing skills, writing professional documents, developing networking contacts, identifying job/graduate school opportunities and compiling a professional career plan, in order to conduct a well-organized job search or prepare for graduate school.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

CGS 1900 - CHOOSING YOUR PATH: INTERNSHIP SEMINAR

Minimum Credits: 1
Maximum Credits: 6
This is an undergraduate course offered through the College of General Studies for student interns in CGS majors such as Humanities, Social Sciences, Natural Sciences, Media and Professional Communications, Dental Hygiene, and Health Services, as well as several CGS certificate programs. Students enrolled in this internship engage in formal and reflective writing, journaling, and analysis about their work experience and how it relates to their academic and career pursuits. Class workshops and group discussions provide further opportunities for debriefing and consolidation of ideas and skills. This is a hybrid course with one in-person workshop and faculty authorization is required. Students must be registered for the internship course at the time they are completing the internship in order to earn credit.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

CGS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Allows advanced students to pursue topics and research of special interest which are not otherwise available.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

Comm Science and Disorders

CSD 1020 - NATURE OF LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of linguistics and psycholinguistics including phonologic, morphologic, syntactic, semantic, and pragmatic aspects of linguistic theory and behavior. Topics may also include neurolinguistics, developmental psycholinguistics, and the relationship between cognition and language.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PSY 0010 or 0200

CSD 1021 - LANGUAGE DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
Students in this course become acquainted with current models and empirical evidence concerning the process of language acquisition.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CSD 1020 or LING 1000; PLAN: Communication Science (BA, BPH) or Not Candidate for Degree CDS

CSD 1022 - TRANSCRIPTION PHONETICS

Minimum Credits: 3
Maximum Credits: 3
The study of the phonemics of American English and of broad and narrow phonetic transcription, utilizing the international phonetic alphabet. Attention will also be paid to the transcription of abnormal speech patterns.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Communication Science (BA, BPH)

CSD 1023 - ANATOMY AND PHYSIOLOGY OF SPEECH

Minimum Credits: 3
Maximum Credits: 3
An overview of the anatomy and physiology of the system involved in speech production including respiration, phonation, articulation, resonation, and nervous system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Communication Science (BA, BPH)

CSD 1024 - ANATOMY AND PHYSIOLOGY OF HEARING

Minimum Credits: 3
Maximum Credits: 3
Study of the anatomy of the outer and middle ears, the middle ear transformer action, and acoustic reflex. Review of cochlear anatomy and theories of the transducer function of the inner ear. Study of central auditory pathways and binatural hearing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: CSD 1029

CSD 1025 - HEARING SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Fundamental concepts in normal audition. Review of acoustics, anatomy, and physiology of auditory system, psychophysical methods and subjective correlates to auditory stimulus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CSD 1024 and CSD 1029; PLAN: Communication Science (BA, BPH) or Not Candidate for Degree CDS

CSD 1026 - SPEECH SCIENCE

Minimum Credits: 3
Maximum Credits: 3
An introduction to speech physiology, acoustics, perception, models of speech production, research methodology and current topics in the area of speech science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CSD 1023 and CSD 1027; PLAN: Communication Science (BA, BPH) or Not Candidate for Degree CDS

CSD 1027 - LAB IN ANAT/PHYSIOLOGY OF SPEECH

Minimum Credits: 1
Maximum Credits: 1
This is a one credit required experience for all students enrolled in the CSD 1023: Anatomy and physiology of speech. Includes opportunites to review and enhance understanding of lecture material, utilizing additional drawings, anatomical models and actual specimens.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: CREQ: 1023

CSD 1028 - LAB IN HEARING SCIENCE

Minimum Credits: 1
Maximum Credits: 1
This is a one credit required experience for all students enrolled in "Hearing Science".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PREQ: CSD 1024 and 1029; CREQ: CSD 1025; PLAN: Communication Science (BA, BPH) or Not Candidate for Degree CDS

CSD 1029 - LAB IN ANAT/PHYSIOLGY OF HEARING

Minimum Credits: 1
Maximum Credits: 1
This is a one credit required experience for all students enrolled in the "Anatomy and Physiology of Hearing" course (1024).
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: CREQ: 1024

CSD 1030 - LAB IN SPEECH SCIENCE

Minimum Credits: 1
Maximum Credits: 1
An introduction to speech physiology, acoustics, perception, models of speech production, research methodology and current topics in the area of speech science.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Communication Science (BA,BPH)

CSD 1099 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Provides advanced students an opportunity to explore in depth an area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

CSD 1101 - INTRO TO CLINICAL PROCESSES

Minimum Credits: 3
Maximum Credits: 3
This course overviews the clinical processes employed in the diagnosis and treatment of speech, language and hearing disorders. Videotaped observations of clinical sessions will be reviewed and discussed, with students preparing detailed observational reports.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CSD 1232; CREQ: CSD 1230

CSD 1102 - INTRODUCTION TO PROFESSIONAL AND CLINICAL ISSUES IN COMMUNICATION SCIENCE & DISORDERS

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to professional issues related to clinical practice in speech-language pathology and audiology. It includes an introduction to issues that affect service delivery across settings, incorporating guided observation and learning activities to facilitate integration and application of knowledge.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CSD 1111 - AURAL REHABILITATION

Minimum Credits: 3
Maximum Credits: 3
Principles and practices of aural habilitation and rehabilitation of children and adults. The effects of hearing loss on communication, social and emotional well-being, cognition, and participation in life activities will be addressed. Basic knowledge of treatment approaches and methods, as well as, resources (including technology) to help clients/patients and their family members, will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

CSD 1230 - INTRODUCTION TO SPEECH LANGUAGE PATHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the field of communication disorders, by acquainting them with the major disorder types as well as the major activities conducted by speech-language pathologists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CSD 1231 - EVALUATION AND TREATMENT OF COMMUNICATION DISEASES

Minimum Credits: 3
Maximum Credits: 3
This course provides students with information concerning identification, assessment, and treatment of clients exhibiting various communication disorders.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Communication Science (BA, BPH)

CSD 1232 - INTRODUCTION TO AUDIOLOGY

Minimum Credits: 3
Maximum Credits: 3
A pre-professional course that introduces elements of the basic audiometric/impedance test battery, advanced tests of diagnostic utility, evaluation of

special populations, and the role of the clinical audiologist in aural rehabilitation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CSD 1233 - INTRODUCTION TO RESEARCH

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to research methods in speech, language, and hearing sciences and communicative disorders. Students will learn how to read and critique research articles more effectively. They will also learn to generate research questions and to develop strategies for collecting data and evaluating experimental effects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Communication Science (BA, BPH)

CSD 1234 - WRITTING PRACTICUM FOR CLINICAL METHODS IN COMMUNICATION SCIENCE & DISORDERS

Minimum Credits: 1
Maximum Credits: 1
A one-hour recitation section will be held weekly that will be dedicated to developing writing skills. Students will be required to produce samples of writing in many formats (article summaries and reviews, diagnostic reports, progress reports, and research reports) to prepare them to be effective communicators in the field of communication science and disorders. Students will be required to critique their own products as well as those of their peers.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Communication Science (BA, BPH)

CSD 1235 - CLINICAL METHODS IN COMMUNICATION SCIENCE & DISORDERS

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to clinical approaches and methods reflected in the management of communication and swallowing disorders across the lifespan. Emphasis is placed on diagnostic and treatment processes and the use of an evidence-based framework to guide clinical decisions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

CSD 1237 - INTRO TO NEUROSCIENCE OF COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course describes the fundamentals of human brain structure and function as relevant to human communication. Methods used to probe the neural bases of speech, language, and hearing function along with current research findings are addressed. An understanding of how the brain processes speech and language provides insight into neurological disorders that affect communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

CSD 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course is designed to enable students to explore an area of particular interest in depth. The student(s) and instructor agree on the topic area, method of study, requirements and evaluation procedure at the outset of the course.
Academic Career: Undergraduate

Course Component: Directed Studies
Grade Component: Letter Grade

CSD 1903 - USA IRELAND: SURVEY OF HEALTH, SOCIAL SERVICES, EDUCATION AND CULTURE

Minimum Credits: 2
Maximum Credits: 2
This a required course for students who have been offered a place in the summer SHRS multi-disciplinary study abroad program in Ireland, CSD 1904. In this seminar-based course, students will explore the history of ireland and the political and economic structure of Northern Ireland and the Republic of Ireland. This will serve as a foundation for further study of the health, educational and social service polices of each country and a basis for comparison with the US. Students will also review the medical, rehabilitation and educational sites to be visited during the summer program and become familiar with the conditions and disorders of the individuals served at each of these facilities.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit
Course Requirements: School of Health and Rehabilitation Sciences students only.

CSD 1904 - SHRS STUDY ABROAD IN IRELAND

Minimum Credits: 6
Maximum Credits: 6
This is an interdisciplinary study abroad opportunity offered through the department of communication science and disorders.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CSD 1903
Course Attributes: Pitt Class

CSD 1905 - SOCIAL AND HEALTH ISSUES IN EAST AFRICA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

Communication: Rhet & Comm

COMMRC 0300 - COMMUNICATION PROCESS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to basic theories, models, and concepts in interpersonal, small group, organizational and intercultural communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement

COMMRC 0310 - RHETORICAL PROCESS

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course designed to give students a sense of the role rhetoric plays in the construction of our social, political, and cultural worlds, and to introduce students to traditional and contemporary approaches to the analysis of rhetorical discourse. Students will prepare a series of short performances for presentation in the recitation sections.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

COMMRC 0311 - RHETORICAL PROCESS HONORS RECITATION

Minimum Credits: 1
Maximum Credits: 1
The honors recitation section is an extension of the COMMRC rhetorical process course, with special emphasis on 1) the formulation of productive questions, 2) deliberate, informed invention, and 3) the conception of student-driven projects that leverage students' academic expertise and lived experience for the generation of collaborative analyses and solutions to social, political, economic, and cultural problems. In pursuing these goals, students will examine and, through their individual coursework, enact the dialectic of Aristotelian and sophistic understandings of rhetoric: the discernment of the means of persuasion available to them and the capturing of possibilities in opportune moments.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

COMMRC 0320 - MASS COMMUNICATION PROCESS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the basic concepts of mass communication research and to the history and development of various media (TV., Radio, newspapers, magazines, etc.).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

COMMRC 0500 - ARGUMENT

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to fundamental principles of argument, and develops argumentative skills through practice analysis and criticism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Creative Work General Ed. Requirement, SCI Expression: Communication General Ed. Req., SCI Expression: Communication General Ed. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

COMMRC 0501 - ARGUMENT HONORS RECITATION

Minimum Credits: 1
Maximum Credits: 1
Students taking the three-credit COMMRC Argument 0500 course in fall term 2014 can enroll in this supplemental one-credit honors section that will meet separately for 75 minutes each week. The honors sidecar will provide high-achieving and motivated students the opportunity to explore class content in extra depth, through seminar-style discussions and assignments, such as public debate and advocacy projects, designed to cultivate and apply advanced argumentation skills and develop capacity for independent critical thinking. The one-credit sidecar is open to students with honors course eligibility (3.25 GPA or instructor permission).
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

COMMRC 0510 - DEBATE

Minimum Credits: 3
Maximum Credits: 3
This course offers academic credit for preparation for, and participation in, intercollegiate debate.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Expression: Communication General Ed. Req.

COMMRC 0520 - PUBLIC SPEAKING

Minimum Credits: 3
Maximum Credits: 3
This course is designed to help students develop increased skill in public speaking by means of theory and practice. This course covers research, organization, style, delivery, and criticism of informative, deliberative, and ceremonial speeches.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Expression: Communication General Ed. Req., SCI Polymathic Contexts: Humanistic GE. Req.

COMMRC 0530 - INTERPERSONAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to introduce students to theories and models of human communication in the face-to-face communication context. Focus of learning is on skill development; lecture, discussion, and practice of communication skills are used to facilitate student learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 0540 - DISCUSSION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to increase skills in critical thinking, decision making, and small group discussion. Students are introduced to theories of group process and practice step-by-step group problem solving related to contemporary issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 0550 - SPEECH COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
The course deals with the theory and practice of preparing manuscript speeches. Students will focus on several principles of speech composition, including stages of speech development, general analysis of the occasion, maintaining attention, sources of persuasion through argument and qualities of effective style.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

COMMRC 0575 - INTRODUCTION TO RADIO PRODUCTION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to cover basic theory and techniques of radio and audio production as well as some basic radio station practices. The course consists of lectures as well as studio sessions featuring equipment demonstrations and production exercises in a professional environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

COMMRC 1013 - RELIGION RIGHT NOW: MEDIA AND RELIGIOUS NEWS IN CONTEMPORARY AMERICA

Minimum Credits: 3
Maximum Credits: 3
It is apparent that Americans devote enormous media attention to the coverage of celebrities, movies and sports, but deal much less skillfully with news coverage of religion. Yet, a glance at any daily news source, print or digital, reveals the pervasiveness of news that involves religious beliefs, conflicts, and practices, and that requires basic knowledge of religious traditions. The purpose of this course is to develop student skills at reading

and interpreting current news stories about religious topics in print and visual media (newspapers, journals, blogs, polls, and television) in order to increase understanding of important religious issues in the contemporary United States, including American coverage of international religious events and leaders. Instruction will include lecture, discussion, film, and small group exercises to report on current events.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 1067 - GLOBAL AND US WOMEN'S RHETORIC

Minimum Credits: 3
Maximum Credits: 3
This course informs students of how global and US women use rhetoric (speeches, writings, symbols and images) to advance their rights and agenda. Students will first read about feminist foremothers' writings as touchstones for understanding how contemporary US women in sports, medicine, science and law negotiate gender equality and rights. Then students will learn about global women's rhetoric. For example, they will examine how women in Africa mobilize for liberation, how Chinese women mediate feminism in a market economy and how women in the Middle East wage everyday resistance against male dominance and clamor for self-autonomy. In addition to reading feminist critical theories and testimonial narratives, a variety of interdisciplinary objects of study such as theater, feature and documentary films, webinar, guest lecture, folk songs and poetry will be incorporated into the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 1070 - UNDERGRADUATE RESEARCH PROSEMINAR

Minimum Credits: 3
Maximum Credits: 3
The Undergraduate research experience opens horizons for students to envision pursuing scholarship as a profession. What does it mean to be a professional scholar? How have such conceptions changed through time, and what might the future hold for those who aspire to a 'life of the mind'? The academic research profession increasingly calls on scholars to explain their work to researchers from other fields, frame their research findings as useful contributions to society, and interact with public audiences. Hence a communication-based perspective provides a useful point of departure for students from the natural sciences, social sciences, and humanities alike to explore these opportunities and challenges in a collaborative, interdisciplinary seminar setting.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

COMMRC 1101 - EVIDENCE

Minimum Credits: 3
Maximum Credits: 3
This course examines the nature and structure of evidence and reason-giving in everyday discourse. Students develop critical skills in evaluating argument and reasoning by examining the evidential requirements of argument in specific rhetorical contexts; science, philosophy, and politics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 1102 - ORGANIZATIONAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
Students in this course are provided with an overview of the relationship between communication and organizing processes. The course emphasizes theories, principles, and concepts of organizational communication. Students learn to analyze the communication which occurs in organizations to recognize sources of communication breakdown and develop an awareness of strategies for prevention and/or resolution of communication on breakdown.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0300 or 0030 or 0100 or 0101 or 7300) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]
Course Attributes: SCI Expression: Communication General Ed. Req.

COMMRC 1103 - RHETORIC AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course explores the constitutive role that rhetoric plays in the formation of culture. Cultural texts and events will be examined both as reflecting and signifying practices. The course focuses on rhetoric's relation to ideology, power, and desire, as well as to class formations and sexual divisions. Selecting two of the above perspectives, students will examine how cultural practices constitute and are constituted by rhetoric.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0320 or 0081 or COMM 0102) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

COMMRC 1104 - POLITICAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course examines the way methods of symbol use are employed in the political arena. Persuasive techniques will be studied as they are used in public debates over issues of policy. Rhetorical criticism will be the primary mode of analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0320 or 0081 or COMM 0102) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]
Course Attributes: University Honors Course

COMMRC 1105 - TELEVISION AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course explores the relationship between television and society. It familiarizes students with the history of the broadcast industry along with related legal, political, and economic issues. The course focuses on analyzing various television programs as constitutive of and constituted by social relations (class, gender, and race).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0320 or COMM 0102) and [ENGCMP 0200 or(ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]
Course Attributes: Childrens Literature

COMMRC 1106 - SMALL GROUP COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
Principles of small group communication are examined in this course. In particular, the examination will reveal the principles of group entry, group formation, group cohesiveness, group verbal and nonverbal message exchanges, group leadership, group problem solving and discussion, and group performance and satisfaction. Individual beliefs, attitudes and behaviors will be compared and contrasted with group beliefs, attitudes and behaviors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0300 or 0030 or 0100 or 7300 or COMM 0101) and [ENGCMP 200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]
Course Attributes: Urban Studies

COMMRC 1109 - NONVERBAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to examine the ways we communicate nonverbally. By nonverbal communication is meant that form of communication wherein messages are sent by virtue of an agent's physical characteristics, adornment, eye behavior, design and selection of environment, spatial relationships, utilization of time, touching behavior, body movements, the choice of objects to fill space, and vocal behavior. Principles and applications of nonverbal communication are discussed.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0300 or 0030 or 7300 or COMM 0101) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]

COMMRC 1110 - THEORIES OF INTERPERSONAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to introduce students to the ways in which researchers conceptualize and study interpersonal communication. Emphasis is upon the various issues which different conceptualizations raise in the study of human relationships. Students will have the opportunity to test the relevancy of insights each conceptualization provides for understanding the communication practices found in natural interactions and personal experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0300 or 0030 or 0100 or 7300 or COMM 0101) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]

COMMRC 1111 - THEORIES OF PERSUASION

Minimum Credits: 3
Maximum Credits: 3
This course surveys theories of persuasion that have been articulated during the twentieth century. It seeks to compare and contrast research about how the spoken word and the visual image influence public belief and action.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0320 or 0081 or COMM 0102) and (COMMRC 0520 or 0052 or COMM 0104) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]
Course Attributes: Global Studies

COMMRC 1112 - THEORIES OF RHETORIC

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to introduce students to major theories of rhetoric ranging from the sophists to some modern theorists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0081) and (COMMRC 0520 or 0052 or COMM 0104) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

COMMRC 1114 - FREEDOM OF SPEECH AND PRESS

Minimum Credits: 3
Maximum Credits: 3
The purpose of the course is to provide students with a critical understanding of the historical themes and contemporary issues involved in the debate over free speech. This course examines philosophies of expression from Plato through the most recent supreme court decisions. Study focuses on cases, major doctrines, and competing interpretations of the first amendment to explore the freedoms and limits of individual expression and regulation of communication industries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0320 or 0081 or COMM 0102) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]
Course Attributes: West European Studies

COMMRC 1115 - AFRICAN AMERICAN RHETORIC

Minimum Credits: 3
Maximum Credits: 3

The purposes of this course are; a historical-critical re view of scholarship in African American rhetoric; and a theoretical-conceptual framework for the study of African American rhetoric. This course places considerable emphasis on the African roots of African American rhetoric, but the ultimate concern is with African Americans' behavior. The course covers consequences of African and European inter actions in America, factors that forged the distinctive aspects of African American rhetoric. The effects of culture, racism, colonialism, and social class on communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 1116 - RHETORIC OF THE AMERICAN COUNTERCULTURE

Minimum Credits: 3
Maximum Credits: 3
This course is concerned with social protest and the modern conception of the outsider, people and groups who choose to separate themselves, or are unwillingly separated, philosophically and ideologically from the society within which they live. One of the most recognizable examples of living the life of the outsider was embodied in the beat generation of the 1940's and 1950's, who embraced self-indulgence as well as literary themes of disenchantment and disengagement. A second example is the counterculture of the 1960's, the hippie generation, who tended to express themselves more in mass countercultural themes like student anti-war activism, popular, socially activist music, and film. Requirements include: discussion participation, 3 short papers (3 pages), 3 longer papers (8 pages), and one class presentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

COMMRC 1117 - 21ST CENTURY PUBLIC ARGUMENT

Minimum Credits: 3
Maximum Credits: 3
The course examines selected moments in American public rhetoric in the 21st century by examining artifacts, speakers and social movements that characterize the U.S. During this period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0320 or 0081 or COMM 0102) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]

COMMRC 1119 - PRESIDENTIAL RHETORIC 2

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the rhetorical analysis of presidential addresses as well the communication styles and methods of U.S. Presidents from Dwight Eisenhower through and including George W. Bush it is important to understand that while the primary focus of the course is on the analysis of the political communication style of the presidents, in order to be able to analyze and evaluate the complex nature of both style and content of the addresses and comments, it is necessary to have an awareness of the background, history and events of the day as each may have impacted and/or precipitated the addresses/comments. Thus, an overview of those critical areas as well as basic communication theory and audience analysis will be an integral part of the course. Course components will include two written projects, speech analyses, one of which will serve as the basis for an individual oral presentation; one group project, a midterm and a final exam.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0320 or 0081 or COMM 0102) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]

COMMRC 1120 - RHETORIC OF COLD WAR

Minimum Credits: 3
Maximum Credits: 3
Course examines selected moments in rhetorical aspects of the cold war with a focus on language, perceptions, arguments and the formation of public policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: (COMMRC 0310 or 0320 or 0081 or COMM 0102) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Russian & East European Studies, Writing Requirement Course

COMMRC 1121 - HISTORY OF MASS MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course provides an in-depth historical examination of U.S. Media (newspapers, magazines, radio, television and/or advertising). Emphasis is placed on the media's technological, political and cultural impact. Topics may vary depending on the particular historical period to be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0320 or COMM 0102) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]

COMMRC 1122 - MEDIA CRITICISM

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to major trends in media criticism (e.G., Psychoanalysis, genre analysis, feminist theory, and cultural studies). Course readings and discussions will focus primarily on television texts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0320 or COMM 0102) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); MIN GRADE 'C' for all listed courses
Course Attributes: Childrens Literature, DSAS Diversity General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, Writing Requirement Course

COMMRC 1123 - RHETORICAL CRITICISM

Minimum Credits: 3
Maximum Credits: 3
The course on rhetorical criticism focuses on the history, methods, and practice of rhetorical criticism in American universities during the twentieth century. The course has been designed to help the student become acquainted with contemporary methods of rhetorical criticism through a combination of lectures, discussions, and practical applications. In addition, the course has been designed to help the student improve his or her writing abilities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0520 or 0052 or 0081 or COMM 0104) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

COMMRC 1125 - MEDIA THEORY

Minimum Credits: 3
Maximum Credits: 3
This course examines the major theoretical approaches in contemporary media studies. Emphasis is placed on understanding the basic tenets of these theoretical models and how they are applied in analyses of media texts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0320 or COMM 0102) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]

COMMRC 1126 - MEDIA AND CONSUMER CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course will examine consumer culture in the twentieth and twenty-first century us. It examines advertising, the rise of the brand, and their roles

in the commercialization of mass media. Of particular importance will be the role that race, class, and gender have played in shaping consumer culture (and vice versa), as well as the significance of the shift from a society based on an understanding of citizens based on democratic practices to one based on consumerist practices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0320 or COMM 0102) and [ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]; MIN GRADE 'C' for all listed courses
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements

COMMRC 1143 - KNOWLEDGE, POWER, AND DESIRE

Minimum Credits: 3
Maximum Credits: 3
This course examines issues of power, desire and knowledge in the work of Michel Foucault, and contrasts them with ideas of knowledge production in contemporary Anglo-American philosophy of science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0081) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

COMMRC 1147 - THE RHETORIC OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
The course examines how scientists persuade and dissuade each other and broader publics in the creation and dissemination of knowledge. It addresses such topics as: rhetoric and the production of scientific findings, communication of scientific knowledge to various publics, persuasive influences on funding decisions, how the public might better understand or influence scientific processes, and the intersection of science and public policy. These will be studied in the context of major science-related controversies of the recent past.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0081) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Global Studies, Writing Requirement Course

COMMRC 1148 - RHETORIC AND HUMAN RIGHTS

Minimum Credits: 3
Maximum Credits: 3
This course focuses upon discourse about human rights--both the affirmation and the denial of human rights. The course also examines the practice of rhetorical criticism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0081) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

COMMRC 1149 - ENVIRONMENTAL RHETORIC

Minimum Credits: 3
Maximum Credits: 3
The primary purpose of this course is to introduce upper division undergraduates to some of the most important rhetorical resources utilized by various participants in contemporary American environmental controversies. The first unit of the course is devoted to various historical and contemporary cross-cultural conceptions of the natural world and the place of humans within what to those in our culture is called the natural 'environment.' In this unit we compare briefly European, Asian and native-American conceptions and the various rhetorics used in each in the attempt to persuade those with differing views. The second unit quickly reviews the development of American environmental rhetorics from the early European settlement of the new world, through the colonial period, the early national era and into the late 19th century, by which time many of the signal concepts and rhetorical resources which continue to inform 21st century American discourse on wildness, nature, environment and ecology

were first elaborated. Unit three examines some of the most significant and contention environmental disputes of the 20th century; including wilderness preservation, the human causes of the great 'dust bowl' devastation of farmland in the 1930s, the sudden relevance of the old science of 'ecology,' the huge influence of Rachel Carson's rhetorical masterpiece, silent spring, exposing the dangers of wide scale use of the pesticide DDT, and the growth of new movements against nuclear, chemical, and biological contamination as well as air, water, oceanic, solid waste, and many other forms of pollution, including even the at first ridiculed dangers of noise and light pollution. Unit four then looks at the environmental movement as it becomes truly global, beginning symbolically with the first 'earth day' activities, protests and teach-ins in 1970, which have continued annually to this day. Unit five will look at the acrimonious 1980s dispute between the new 'deep ecology' movement and the more mainstream environmental lobbying organizations like the sierra club, the nature conservancy etc. which focus primarily on lobbying congress for environmental reforms, rather than advocating a complete revolution in the way each individual human lives. Unit six will then treat some of the many enormous new environmental challenges of the 21st century, from still unrestrained global warming, to ozone depletion, to the depletion of fish stocks, to deforestation and desertification, to increasing human population, to widespread species extinctions, to the depletion of natural resources, from oil, to arable land, and even potable water, and so forth. Students should leave the course with a rigorous understanding of where contemporary environmental rhetorical resources come from and how they continue to operate in all manner of contemporary environmental and ecological controversies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 1151 - BRITISH BROADCASTING TODAY

Minimum Credits: 3
Maximum Credits: 3
To examine the variety and range of programme genres broad cast on British TV and radio. Reference will be made to the philosophy and industry structures which nurture them. New developments in technology, regulation and international markets will be considered as will scheduling issues. The cultural underpinnings of the system will be analyzed and internal industry and political debates will be addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: West European Studies

COMMRC 1156 - ETHICS AND MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course will address the principal ethical issues facing print and broadcast journalism. It will consider the practical dilemmas reporters and editors have to deal with and relate them to a moral framework. The focus will be on the real time arguments that arise almost daily in media coverage of matters of public controversy - crime, war, privacy and the like. The course objectives are to learn how to evaluate the performance of the media and to help students develop their own ethical philosophy. Problems of regulation and codes of practice will also be examined. Students will be able to take advantage of London's global importance as a media hub and the distinctive media culture of the UK through a program of case studies, visits and guest lectures by practitioners.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

COMMRC 1160 - VISUAL RHETORIC

Minimum Credits: 3
Maximum Credits: 3
This course centers on research concerning visual rhetoric. It will concentrate primarily on a range of interpretive and critical approaches for studying instances of visual communication. Students will write three papers demonstrating their ability to analyze and interpret visual texts. The method of instruction includes lecture, discussion, film and practice workshops. Considerations of gender, sex, race, sexuality, and class will be interwoven throughout the course materials and discussions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) and (COMMRC 0310 or 0081)
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, Writing Requirement Course

COMMRC 1161 - COMMUNICATION ETHICS

Minimum Credits: 3
Maximum Credits: 3

Contemporary society offers a wide variety of topics for ethical consideration: deception, lying, fidelity in relationships, hate speech, harassment, privacy, intellectual property, pornography and many others. This class examines the ethical dimensions of communication through the prism of case studies. Students are introduced to traditional forms of ethical reasoning as well as emerging concerns raised by the internet and digital media. One major question that the course addresses is the following: do the internet and new information technologies represent qualitatively new ethical challenges or are these versions of traditional ethical dilemmas? The bulk of class time uses discussion and case studies to emphasize the practice of ethical deliberation and the ability to reason about ethical issues and problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

COMMRC 1162 - INVENTION: WHERE DO GOOD IDEAS COME FROM?

Minimum Credits: 3
Maximum Credits: 3
This course helps us investigate questions that will be crucial for tomorrow's communities of inquiry. How should we understand creativity, imagination, and invention? What are the conditions most conducive to innovation? What can histories of creative individuals and creative groups tell us about the origins of, to use the TED lingo, "ideas worth spreading"? This course examines creativity in a variety of contexts, both scientific and artistic. It draws on the best work in a number of disciplines, principally rhetoric but also philosophy of science, literary theory, economics, and intellectual history. And students will have the opportunity to develop projects on case studies of their choosing. The course satisfies three credit hours toward the interdisciplinary core seminar coursework requirement in the Honors College Certificate in Undergraduate Studies. Students without the GPA or course prerequisites designated by the UHC may also enroll with the permission of the instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

COMMRC 1170 - CROSS CULTURAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course will increase the understanding of basic concepts and principles regarding communication between people from different racial, ethnic, and cultural backgrounds within Australia, including aboriginal, and immigrant populations. The course will use theory and research in the area of intercultural communication, and will help you develop this knowledge in understanding and improving human interaction in both the study abroad environment and international contexts. It will develop effective intercultural communication skills for learning abroad in Australia, and focus on a study of the social, structural and historical dimensions of relations between and among racial, ethnic and gender groups in contemporary Australian society. This course is designed to increase student's awareness and appreciation for the complexity of intercultural communication skills in everyday situations. It offers a critical perspective on current theory and research in intercultural communication. The primary objective of the course is to develop cultural relativist attitude.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

COMMRC 1175 - COMMUNICATION AND GLOBAL COMPETENCE

Minimum Credits: 3
Maximum Credits: 3
With the rise of global mobility and communication, encountering people from a variety of cultures, and the need for effective communication, is commonplace. This course explores the interaction between culture and communication and introduces students to the knowledge and skills necessary to attain global competence. In addition, this course introduces the construct of global competence; creates the opportunity to analyze and evaluate how our own cultural identity influences communication with others; engages interaction with the host culture; and prepares the students with knowledge and skills to be effective and ethical intercultural communicators. This class is held in Dublin and will include lectures, class discussions, simulations, interactive examples, case studies, media presentations cultural encounters, and field experiences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Study Abroad

COMMRC 1520 - ADVANCED PUBLIC SPEAKING

Minimum Credits: 3
Maximum Credits: 3
This course teaches students advanced skills needed in the preparation, delivery, and evaluation of formal public address. Advanced public speaking extends what was learned in the introductory public speaking course by examining more advanced theories and strategies of public address, critically evaluating public discourse in a variety of settings and sharpening the extemporaneous delivery skills of the student.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

COMMRC 1710 - SENIOR THESIS IN COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
Research on a special project in rhetoric, communication, or media. The study will be embodied in a thesis supervised by the instructor and approved by additional departmental faculty.
Academic Career: Undergraduate
Course Component: Thesis Research
Grade Component: Satisfactory/No Credit

COMMRC 1730 - SPECIAL TOPICS IN COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course covers a specialized topic in communication. Topics vary every semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0300 or 0030 or 0100 or 7300 or COMM 0101) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

COMMRC 1731 - SPECIAL TOPICS IN RHETORIC

Minimum Credits: 3
Maximum Credits: 3
This course covers a specialized topic in rhetoric. Topics vary every semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0310 or 0081) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: African Studies, Writing Requirement Course

COMMRC 1732 - SPECIAL TOPICS IN MASS COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course covers a specialized topic in mass communication. Topics vary every semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COMMRC 0320 or COMM 0102) and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

COMMRC 1900 - COMMUNICATION INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Internships provide practical work experience related to the student's course of study.
Academic Career: Undergraduate

Course Component: Internship
Grade Component: Satisfactory/No Credit

COMMRC 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Independent study is a program of academic reading and research taken under the direction of a faculty sponsor.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

COMMRC 1904 - UNDERGRADUATE TEACHING EXPERIENCE IN COMMUNICATION

Minimum Credits: 1
Maximum Credits: 3
Provides an opportunity for qualified Undergraduate students, under the guidance of a classroom teacher, to have a first-hand experience with peer mentoring and classroom instruction as a UTA. Participation is by instructor invitation only.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

COMMRC 1905 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 3
A course for upper level students who have completed at least 45 credits (12 credits in COMMRC) who wish to conduct field research in communication. The course is an opportunity for students to create a semester-long self-designed project resulting in a body of advanced work. Regular progress reports and critiques are scheduled with the instructor individually.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Computer Engineering

COE 0031 - LINEAR CIRCUITS AND SYSTEMS 1

Minimum Credits: 4
Maximum Credits: 4
The analysis of linear circuits. Electric variables and circuit elements; kirchoff's and ohm's law; mesh and node equations; thevenin and norton equivalent circuits; first and second-order circuits; time domain analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 00150 or 0230 or 0231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PLAN: Computer Engineering (BSE)

COE 0035 - LINEAR CIRCUITS AND SYSTEMS LAB FOR TRANSFERS STUDENTS

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: (MATH 0150 or 0230 or 0231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PLAN: Computer Engineering (BSE)

COE 0041 - LINEAR CIRCUITS AND SYSTEMS 2

Minimum Credits: 3
Maximum Credits: 3
Sinusoidal steady-state analysis, network functions, real and reactive power, three-phase circuits, laplace transform method, two-port networks, and fourier series.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0031 or COE 0031; PROG: Swanson School of Engineering

COE 0132 - DIGITAL LOGIC

Minimum Credits: 3
Maximum Credits: 3
Introduction to digital systems, boolean algebra, minimization of logic functions, combinational and sequential circuit design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 00150 or 0230 or 0231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PLAN: Computer Engineering (BSE)

COE 0147 - COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
This course provides a detailed introduction into the basics of computer design common to most computer architectures including topics of digital computer data representation, arithmetic and logic units, instruction formats, control, microprocessor architecture, and memory systems. This course includes a heavy focus on MIPS assembly language and its interaction with a RISC computer architecture. This course satisfies the prerequisite to CS/COE 1541 computer architecture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: COE 0132 or ECE 0132; CREQ: COE 0445 or CS 0445; PLAN: Computer Engineering (BSE)

COE 0257 - ANALYSIS AND DESIGN OF ELECTRONIC CIRCUITS

Minimum Credits: 3
Maximum Credits: 3
Diode circuits, power supply design; analysis and design of bipolar junction transistor and field effect transistor amplifiers. Bias stability analysis, power amplifiers. Ideal operational amplifiers. CMOS inverters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: COE 0031 or ECE 0031 and PLAN:Computer Engineering

COE 0401 - INTERMEDIATE PROGRAMMING USING JAVA

Minimum Credits: 4
Maximum Credits: 4
This course is a rigorous introduction to the fundamental concepts and techniques of computer programming using the java programming language. This is a first course for students who intend to major in computer science or computer engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Computer Engineering

COE 0445 - DATA STRUCTURES

Minimum Credits: 3
Maximum Credits: 3
This course emphasizes the study of the basic data structures of computer science (stacks, queues, trees, lists) and their implementations using the java language. Included in this study are programming techniques which use recursion, reference variables, and dynamic memory allocation. Students in this course are also introduced to various searching and sorting methods and are expected to develop an intuitive understanding of the

complexity of these algorithms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: COE 0401 or CS 0401; PLAN: Computer Engineering

COE 0447 - COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to study the components of computing systems common to most computer architectures. In particular, this class is meant to introduce data representation, types of processors, memory types, and hierarchy, and device drivers. The students will learn mips assembly language, the design of arithmetic and logic units, and basic designs for risc processors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: COE 0445 or CS 0445; PLAN: Computer Engineering

COE 0449 - INTRODUCTION TO SYSTEMS SOFTWARE

Minimum Credits: 3
Maximum Credits: 3
This course covers topics related to the interface of hardware and software. It covers device interface and hardware synchronization at the loWest level of the operating system, the linkage of operating system services to application software, and the fundamental mechanisms for computer communications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COE 0132 or ECE 0132) and (COE 0445 or CS 0445); CREQ: COE 0142 or 0147 or 0447 or ECE 0142 or CS 0447; PLAN:Computer Engineering

COE 0501 - DIGITAL SYSTEMS LABORATORY

Minimum Credits: 3
Maximum Credits: 3
This course and laboratory introduces students to the basic concepts of digital circuits, simulation and instrumentation, systems composed of discrete devices, logic gates, combinatorial and sequential circuits are designed, simulated, built and tested.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0031 or COE 0031) and (ECE 0132 or COE 0132); PLAN: Computer Engineering (BSE)

COE 1161 - EMBEDDED COMPUTER SYS DESIGN 2

Minimum Credits: 3
Maximum Credits: 3
Organized as a full term project carried out by student design groups. A complex embedded system will be designed, implemented and tested using Altera and other cad tools. Grade will be based on project reviews and the final project report. Proper design process will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1160 or COE 1160; PROG: Swanson School of Engineering; PLAN: Computer Engineering

COE 1170 - SPECIAL TOPICS: COMPUTER

Minimum Credits: 1
Maximum Credits: 1
An undergraduate course dealing with special topics of current interest in computers.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

Course Requirements: PREQ: ECE 0501 or COE 0501 or ECE 1201; PROG: Swanson School of Engineering; PLAN: Computer Engineering Students Only

COE 1186 - SOFTWARE ENGINEERING

Minimum Credits: 4
Maximum Credits: 4
This course and laboratory introduces classical and object-oriented software engineering. Software requirements, specification, object-oriented analysis, design, implementation, integration, and maintenance are covered. Each of these phases is examined on a practical level through a semester long, formal design project that involves the creation of a java-based internet application. Additional java-related topics are taught, including java applets, custom networking, remote database access, SQL, and multimedia extensions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0142) or (COE 0142 or 0147 or 0447) or (CS 0447) and (COE 0401 or CS 0401); PLAN: Computer Engineering (BSE)

COE 1188 - CYBER-PHYSICAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
The arrival of the internet-of-things (IOT) has brought about a world where the everyday objects we interact with, ranging from health monitoring devices to appliances and automobiles, are embedded with intelligence, the ability to communicate over a network and act on information stored in the "cloud". In this intensive laboratory course, students, by way of a series of projects, follow the journey data takes from a sensor, to a microcontroller, through a network and then to the cloud (and back!). Along the way students are exposed to a broad range of electrical and computer engineering topics including electronic design, embedded programming, digital signal processing, networking and information theory, wireless communications, antenna theory and big data analytics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (COE 0501 or ECE 0501) and (COE 0147 or COE 0447 or ECE 0142) and (COE 0401 or CS 0401); PLAN: Computer Engineering

COE 1192 - INTRODUCTION TO VLSI DESIGN

Minimum Credits: 4
Maximum Credits: 4
Introduction to the concepts and techniques of modern integrated circuit design. Use of Computer Aided Design (CAD) tools for circuit design and simulation. Senior design course. Includes a laboratory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (COE 0147 or 0447) or CS 0447 or ECE 0142; PROG: Swanson School of Engineering

COE 1193 - ADVANCED VLSI DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course is organized as a full semester project in conjunction with a small amount of lecture material on advanced CMOS digital design techniques, as well as the group design process itself. Students form groups of 3 to 5 per group that design and implement different VLSI projects which are then fabricated by MOSIS and returned for testing. Focus is on teamwork with frequent oral/written reports.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

COE 1501 - ALGORITHM IMPLEMENTATION

Minimum Credits: 3
Maximum Credits: 3
This course covers a broad range of the most commonly used algorithms: some examples include algorithms for sorting, searching, encryption, graph searching, pattern matching, geometric intersection, compression, and local search. The students will implement and test several algorithms. The

course is programming-intensive.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COE 0132 or ECE 0132) and (COE 0445 or CS 0445); PLAN: Computer Engineering

COE 1502 - ADVANCED DIGITAL DESIGN CONCEPTS

Minimum Credits: 3
Maximum Credits: 3
This course and laboratory builds on the student's knowledge of digital design, computer architecture principles, and assembly language. It covers both theoretical and practical considerations in the design of modern computing systems using computer aided design tools and programmable logic devices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: COE 0501 or ECE 0501; CREQ: COE 1541 or CS 1541; PLAN: Computer Engineering (BSE)

COE 1520 - PROGRAMMING LANGUAGES FOR WEB APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
Various programming paradigms will be studied using java and scripting languages. The use of java in programming web based applications, network applications, and the use of the extensive java libraries will be studied. The programming paradigm of building software by gluing components will be explored through the use of scripting languages such as PERL and JavaScript. Applications include developing guis and internet programming.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: COE 0445 or CS 0445; PLAN: Computer Engineering (BSE)

COE 1530 - SOFTWARE ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide a general survey of software engineering. Some of the topics covered include: project planning and management, design techniques, verification and validation, and software maintenance. Particular emphasis is on a group project in which a group of students implement a system from its specification.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: COE 0445 or CS 0445; PLAN: Computer Engineering (BSE)

COE 1541 - INTRODUCTION TO COMPUTER ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
Examination of computer architecture and hardware system organization. Topics include: CPU organization, sequential and microprogrammed control, instruction set implementation, memory organizations, input/output structure, peripherals and computer communications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COE or 0147 or 0447 or CS 0447) and (COE 0449 or CS 0449); PROG: Computer Engineering (BSE)

COE 1550 - INTRODUCTION TO OPERATING SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
An introduction to basic concepts of operating systems common to most computer systems, which interfaces the machine with upper-level programs. This course will introduce processes as processing unit, process management, concurrency, communication, memory management and protection, and file systems.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COE 0142 or 0147 or 0447 or ECE 0142 or CS 0447) and (COE 0449 or CS 0449); PLAN: Computer Engineering (BSE)

COE 1622 - INTRODUCTION TO COMPILER DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the basic concepts of compiler design and implementation. Topics include lexical analysis, various types of parsers, intermediate and object code generation and code optimization. The material will be presented from an implementation point of view rather than a formal approach. The impact of language design on compilers will also be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COE 0142 or ECE 0142 or COE 0447 or CS 0447 or COE 0147) and (COE 0445 or CS 0445); PLAN: Computer Engineering (BSE)

COE 1631 - SOFTWARE DESIGN METHODOLOGY

Minimum Credits: 3
Maximum Credits: 3
Construction of large computerized systems proceeds through the stages of requirements analysis, specification, and implementation. This course deals with requirements analysis and specification, in particular, methodologies for improving the reliability of specifications (executable specifications and system phototypes).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (COE 0132 or ECE 0132) and (COE 0445 or CS 0445); PLAN: Computer Engineering (BSE)

COE 1651 - ADVANCED SYSTEMS SOFTWARE

Minimum Credits: 3
Maximum Credits: 3
To discuss in depth some advanced features of fundamental importance in the design of operating systems. The subjects discussed include interprocess communication, real-time scheduling, advanced file systems, security and protection mechanisms. The objective of the course is to provide an awareness of the known solutions to these problems and to the limitations of these solutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: Swanson School of Engineering

COE 1885 - DEPARTMENTAL SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Seminars are designed to acquaint the student with aspects of engineering that are not normally encountered in classes and school activities and include a wide range of topics such as the significance of engineering as a profession, ethical problems in engineering, and skills required for a successful engineering career.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

COE 1896 - SENIOR DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
A full-term engineering project involving definition, literature search, prototype design, and construction, with written and oral reviews. Senior design course.
Academic Career: Undergraduate
Course Component: Directed Studies

Grade Component: Letter Grade
Course Requirements: PREQ: (COE 0257 or ECE 0257) or (COE 0041 or ECE 0041) and (COE 0445 or CS 0445); PLAN: Computer Engineering (BSE)

COE 1898 - ENGINEERING PROJECT

Minimum Credits: 1
Maximum Credits: 3
An investigation of an approved engineering subject under the supervision of a faculty monitor. Must be approved in advance by the faculty monitor and the department chair.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

Computer Science

CS 0004 - INTRODUCTION TO COMPUTER PROGRAMMING-BASIC

Minimum Credits: 3
Maximum Credits: 3
This is a first course in computer science. It is designed to be of special interest to students majoring in one of the social sciences or humanities. Objectives of this course include use of the computer in an interactive environment; problem analysis and the development of algorithms; learning the basic language; designing; coding; and documenting programs using techniques of good programming style.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Algebra General Ed. Requirement, DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement

CS 0007 - INTRODUCTION TO COMPUTER PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
This is a first course in computer science programming. It is recommended for those students intending to major in computer science who do not have the required background for cs 0401. It may also be of interest to students majoring in one of the social sciences or humanities. The focus of the course is on problem analysis and the development of algorithms and computer programs in a modern high-level language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Algebra General Ed. Requirement, DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement

CS 0008 - INTRODUCTION TO COMPUTER PROGRAMMING WITH PYTHON

Minimum Credits: 3
Maximum Credits: 3
This is course is designed as a first course in computer science programming. It is recommended for those students majoring in one of the natural sciences, social sciences, or humanities who wish to learn the fundamentals of programming. It is also useful to students intending to major in computer science who do not have the required background for CS 0401. The focus of this course is on problem analysis, the development of algorithms and computer programs in python. Instruction will be provided to students interested in taking CS 401 in converting python programs to Java.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement

CS 0010 - INTRODUCTION TO COMPUTING FOR SYSTEMS ENGINEERS

Minimum Credits: 4
Maximum Credits: 4
All of the CS 001X courses will introduce students to the concepts of computing and computer programming. Students in these courses will learn

how a computer works and how to write programs in order to use the computer as a problem solving tool. A major focus of the class will be on developing problem-solving skills (e.g., how to decompose a problem into more manageable parts and how to combine those parts into an overall solution). CS 0010 in particular will focus on problems related to IoT and engineering. Students will be required to purchase a Raspberry Pi and sensors in order to complete the projects and labs assigned throughout the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CS 0011 - INTRODUCTION TO COMPUTING FOR SCIENTISTS

Minimum Credits: 4
Maximum Credits: 4
All of the CS 001X courses will introduce students to the concepts of computing and computer programming. Students in these courses will learn how a computer works and how to write programs in order to use the computer as a problem solving tool. A major focus of the class will be on developing problem-solving skills (e.g., how to decompose a problem into more manageable parts and how to combine those parts into an overall solution). CS 0011 in particular will focus on problems related to the natural sciences with an emphasis on computational biology. Domain-specific projects and labs will be assigned throughout the course to encourage students in the natural sciences to apply computing to their field of study.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis

CS 0012 - INTRODUCTION TO COMPUTING FOR THE HUMANITIES

Minimum Credits: 4
Maximum Credits: 4
All of the CS 001X courses will introduce students to the concepts of computing and computer programming. Students in these courses will learn how a computer works and how to write programs in order to use the computer as a problem solving tool. A major focus of the class will be on developing problem-solving skills (e.g., how to decompose a problem into more manageable parts and how to combine those parts into an overall solution). CS 0012 in particular will focus on problems related to the humanities and allied social sciences. Domain-specific projects and labs will be assigned throughout the course to encourage students in these fields to apply computing to their studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis

CS 0090 - SUSTAINABILITY AND COMPUTING

Minimum Credits: 3
Maximum Credits: 3
What is the environmental impact of websites such as Facebook or Amazon? How is society affected by throwing away old computers? The purpose of this course is to introduce the intersection of computers and society. Sustainability will be used as a concept to bridge the tradeoffs between technological and ecological forces. Topics include but are not limited to: energy production, e-books, telecommuting and e-waste. No computer programming or math background required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CS 0131 - SOFTWARE FOR PERSONAL COMPUTING

Minimum Credits: 3
Maximum Credits: 3
An intermediate-level course in computer science for students majoring in areas other than computer science. Objectives include a non-technical study of the windows NT operating system; development of applications using software selected from the principal areas of applications for personal computing. These include word-processing (MS Word), spreadsheets (MS Excel), and relational databases (MS Access).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CS 0134 - WEB SITE DESIGN AND DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course will provide a basic understanding of the methods and techniques of developing a simple to moderately complex web site. Using the

current standard web page language, students will be instructed on creating and maintaining a simple web site. After the foundation language has been established, the aid of an internet editor will be introduced. A second web-based language will be included to further enhance the web sites.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CS 0155 - DATA WITCHCRAFT

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to data science, designed as a first course in computer science, for non-CS majors and CS minors within the honors college, aiming to introduce students to basic data management technologies and data analytics skills. The course will consist of about 1/3 of introduction to computer programming, 1/3 of introduction to data management technologies, and 1/3 of introduction to data analytics. The course will adopt the point of view of a user of data (e.g. who is just combining data and analyzing it using tools) and not a provider of data (e.g. who would be implementing a database-driven web site), as is typically the case for related courses for CS majors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

CS 0334 - INTERMEDIATE WEB SITE DESIGN AND DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
The course will consist of advanced implementations of both markup as well as scripting languages. In addition, students will be introduced to a graphical interface application that will allow them to explore concepts of server side web development. A reflective programming language and database application will be used to introduce the server side web development concepts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CS 0007 or 0134 or 0401 or INFSCI 0017 (Min Grade 'C' or Transfer)

CS 0401 - INTERMEDIATE PROGRAMMING USING JAVA

Minimum Credits: 4
Maximum Credits: 4
This course is a rigorous introduction to the fundamental concepts and techniques of computer programming using the java programming language. This is a first course for students who intend to major in computer science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement

CS 0441 - DISCRETE STRUCTURES FOR CS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to understand and use (abstract) discrete structures that are backbones of computer science. In particular, this class is meant to introduce logic, proofs, sets, relations, functions, counting, and probability, with an emphasis on applications in computer science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: MATH 0220 or 0230 or 0235 or 0140 (Min Grade 'C' or Transfer) or (Plan: CS-MN or CSCI-MN and MATH 0120)

CS 0445 - DATA STRUCTURES

Minimum Credits: 3
Maximum Credits: 3
This course emphasizes the study of the basic data structures of computer science (stacks, queues, trees, lists) and their implementations using the java language included in this study are programming techniques which use recursion, reference variables, and dynamic memory allocation. Students in this course are also introduced to various searching and sorting methods and also expected to develop an intuitive understanding of the complexity of these algorithms.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0401 or COE 0401 or 0422 or CIST 0150 (MIN GRADE 'C' or Transfer)

CS 0447 - COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to study the components of computing systems common to most computer architectures. In particular, this class is meant to introduce data representation, types of processors, memory types and hierarchy, and device drivers. The students will learn MIPS assembly language, the design of arithmetic and logic units, and basic designs for RISC processors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: CS 0445 or COE 0445 or 0458 (Min Grade 'C' or Transfer)

CS 0449 - INTRODUCTION TO SYSTEMS SOFTWARE

Minimum Credits: 3
Maximum Credits: 3
This course covers topics related to the interface of hardware and software. It covers device interfaces and hardware synchronization at the lowest level of the operating system, the linkage of operating system services to application software, and the fundamental mechanisms for computer communications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0445 or CS 0455 (Min Grade 'C' or Transfer); CREQ: CS 0447 or CS 0456 or COE 0447 or COE 0147

CS 0590 - SOCIAL IMPLICATIONS OF COMPUTING TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0002 or 0003 or 0004 or 0007 or 0008 or 0015 or 0101 or 0401 or COE 0401 (Min Grade 'C' or Transfer for All Listed Courses)
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req.

CS 0699 - SPECIAL TOPICS IN COMPUTER SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Various topics in Computer Science will be introduced and discussed. This course in not part of the Computer Science major.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0401 or COE 0401 or CS 0004 or 0007 or 0008 or COE 0401 (Min Grade 'C' or Transfer for All Listed Courses)

CS 1501 - ALGORITHM IMPLEMENTATION

Minimum Credits: 3
Maximum Credits: 3
The course covers a broad range of the most commonly used algorithms: some examples include algorithms for sorting, searching, encryption, compression, and local search. The students will implement and test several algorithms. The course is programming intensive.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0441 or CS 0406) and (CS 0445 or CS 0455 or COE 0445) ; (MIN GRADE 'C' or Transfer FOR ALL COURSES LISTED)

CS 1502 - FORMAL METHODS IN COMPUTER SCIENCE

Minimum Credits: 3
Maximum Credits: 3
The course is an introduction to the theory of information and computation as a physical phenomenon. The course covers standard formalizations of computational concepts and proofs of noteworthy implications of these formalizations. Typical topics include: finite automata, computability, reducibility, and complexity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0441 or CS 0406) and (CS 0445 or CS 0455 or COE 0445) ; (MIN GRADE C' or Transfer FOR ALL COURSES LISTED)

CS 1510 - ALGORITHM DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course will cover methods and strategies that are useful for the design of nonnumeric algorithms. Students are expected to design their own algorithms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [(CS 1501 or COE 1501) and CS 1502] or (CS 0458 and CS 1710); MIN GRADE 'C' or Transfer FOR ALL COURSES LISTED

CS 1511 - THEORY OF COMPUTATION

Minimum Credits: 3
Maximum Credits: 3
Understanding the theory of computation provides deeper insights into various topics in computer science. This is an introductory level theory course. The aim of this course is to study the power (or lack of it) of various models of computation. Topics to be covered include automata, formal languages, computability, and computational complexity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 1502; (MIN GRADE 'C' or Transfer FOR ALL COURSES LISTED)

CS 1520 - PROGRAMMING LANGUAGE FOR WEB APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
Various programming paradigms will be studied using java and scripting languages. The use of java in programming web based applications, network applications, and the use of the extensive java libraries will be studied. The programming paradigm of building software by gluing components will be explored through the use of scripting languages such as perl and JavaScript. Applications include developing guis and internet programming.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0445 or COE 0445; (MIN GRADE 'C' or Transfer)

CS 1530 - SOFTWARE ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide a general survey of software engineering. Some of the topics covered include: project planning and management, design techniques, verification and validation, and software maintenance. Particular emphasis is on a group project in which a group of students implement a system from its specification.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0445 or COE 0445; (MIN GRADE 'C' or Transfer)

CS 1538 - INTRODUCTION TO SIMULATION

Minimum Credits: 3
Maximum Credits: 3
The course introduces students to the concepts, definitions, techniques applicable to the simulation of systems. Both continuous and discrete modeling are covered, with emphasis on the latter. The objective of this course is to familiarize the students with several modern discrete simulation languages, and their use in modeling. Topics include: systems characterization, classification, and modeling; pertinence of probability and statistics theory for stochastic processes and model measurement; discrete systems simulation viewpoints; software modeling techniques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0447 and (STAT 1000 or 1100 or 1151 or MATH 1153) (Min Grade 'C' or Transfer for All Listed Courses)

CS 1541 - INTRODUCTION TO COMPUTER ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
Examination of computer architecture and hardware system organization. Topics include: CPU organization, sequential and microprogrammed control, instruction set implementation, memory organizations, input/output structure, peripherals and computer communications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0447 or COE 0447) and (CS 0449 or COE 0449) ; (MIN GRADE 'C' or Transfer)

CS 1550 - INTRODUCTION TO OPERATING SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
An introduction to basic concepts of operating systems, common to most computer systems, which interfaces the machine with upper-level programs. This course will introduce processes as processing unit, process management, concurrency, communication, memory management and protection, and file systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0447 or COE 0447 or COE 0147) and (CS 0449 or COE 0449) or (0456 and 1750); MIN GRADE 'C' or TRANSFER FOR ALL COURSES LISTED

CS 1555 - DATABASE MANAGEMENT SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to provide an in-depth knowledge of database systems design. Thus, the emphasis is on how to model ones own data and how to use available database management systems effectively. Towards this end, the relational and the object-relational models are discussed in great detail and object-oriented and other data models are also presented. Commercial database management systems are examined and students get practical experience through the use of such systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 1501 (Min Grade 'C')

CS 1566 - INTRODUCTION COMPUTER GRAPHICS

Minimum Credits: 3
Maximum Credits: 3
This course offers an in-depth exploration of fundamental concepts in 2d and 3d computer graphics. The bulk of the course is devoted to 3d modeling, geometric transformations, and 3d viewing and rendering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0447 or 0456 or COE 0447 or COE 0147); (MIN GRADE 'C' or TRANSFER FOR ALL COURSES LISTED)

CS 1567 - PROGRAMMING SYSTEM DESIGN ON A MOBILE ROBOT PLATFORM

Minimum Credits: 3
Maximum Credits: 3
Students will be introduced to a variety of programming techniques and paradigms, for implementing medium- to large scale software systems. System integration is done on a mobile robot platform rather than a traditional desktop system. However, this is not a course in robotics. It is a course about building systems in a real-world environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS (0441 and (0445 or COE 0445)) or (0406 and 0455) (MIN GRADE 'C' or Transfer), MIN GPA: 3.25
Course Attributes: University Honors Course

CS 1571 - INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Minimum Credits: 3
Maximum Credits: 3
This course will provide an introduction to the fundamental concepts and techniques underlying the construction of intelligent computer systems. Topics covered in the course include: problem solving and search, logic and knowledge representation, planning, reasoning and decision-making in the presence of uncertainty, and machine learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 1501 or COE 1501) and CS 1502 (Min Grade 'C' or Transfer for All Listed Courses)

CS 1621 - STRUCTURE PROGRAMMING LANGUAGES

Minimum Credits: 3
Maximum Credits: 3
An analytical examination of modern high-level programming language structures; including design specification and implementation. Advanced forms of data types, expressions, and control primitives. Relationship of storage management techniques and language design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS (0441 and 0445) or (0406 and 0455); (MIN GRADE 'C' or TRANSFER FOR ALL COURSES LISTED)

CS 1622 - INTRODUCTION TO COMPILER DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the basic concepts of compiler design and implementation. Topics include lexical analysis, various types of parsers, intermediate and object code generation and code optimization. The material will be presented from an implementation point of view rather than a formal approach. The impact of language design on compilers will also be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0441 and ((CS or COE 0447) or (CS 0406 and 0456)); (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)

CS 1631 - SOFTWARE DESIGN METHODOLOGY

Minimum Credits: 3
Maximum Credits: 3
Construction of large computerized systems proceeds through the stages of requirements analysis, specification, and implementation. This course deals with requirements analysis and specification, in particular, methodologies for improving the reliability of specifications (executable specifications and system phototypes).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0441 and (CS or COE 0445)) or (CS 0406 and 0455); (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)

CS 1632 - SOFTWARE QUALITY ASSURANCE

Minimum Credits: 3
Maximum Credits: 3
This course provides students with a broad understanding of modern software testing and quality assurance. Although it will cover testing theory, the emphasis is on providing practical skills in software testing currently used in industry. To that end, it will cover: manual and automated tests, test-driven and behavior-driven development, performance testing, and understanding and developing a testing process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0445 or COE 0445 or CS 0455) or (PLAN COE and (CS 0445 or COE 0445) (Min Grade 'C' or Transfer for All Listed Courses)

CS 1635 - INTERFACE DESIGN METHODOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: CS 0445 (MIN GRADE 'C' or Transfer)

CS 1637 - INTRODUCTION TO HUMAN-COMPUTER INTERACTION

Minimum Credits: 3
Maximum Credits: 3
The focus of the course is on the design of human-centered systems that people find usable, desirable, and useful. The course will introduce students to user-centered practices in Human Computer Interaction. The course will cover the theory and practical application of Human-Computer Interaction concepts and ideas. Students will gain knowledge on diverse methods and tools to understand, improve, and create technology that harmonizes with and improves human capabilities, goals, and social environments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CS 1501: Algorithm Implementation; MIN GRADE: C or Transfer

CS 1640 - BIOINFORMATICS SOFTWARE DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course will develop software for bioinformatic applications.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: CS 1501 or COE 1501 or BIOSC 1540 (Min Grade 'C' or Transfer); PLAN: Bioinformatics
Course Attributes: Capstone Course

CS 1645 - INTRODUCTION TO HIGH PERFORMANCE COMPUTING SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the architecture of and software techniques for parallel and high performance computing systems. The content includes fundamental aspects of vector processing, shared-memory, and distributed-memory systems. Specific applications in parallel processing paradigms will be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0447 and 0449 and 1501; (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)

CS 1651 - ADVANCED SYSTEMS SOFTWARE

Minimum Credits: 3
Maximum Credits: 3
To discuss in depth some advanced features of fundamental importance in the design of operating systems. The subjects discussed include interprocess communication, real-time scheduling, advanced file systems, security and protection mechanisms. The objective of the course is to

provide an understanding of these advanced issues, as well as to bring awareness of the known solutions to these problems and to the limitations of these solutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 1550 or 1312 or 1792; (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)

CS 1652 - DATA COMMUNICATION AND COMPUTER NETWORKS

Minimum Credits: 3
Maximum Credits: 3
This course will include basic principles and topics of computer communications. An overview of interfaces that interconnect hardware and software components, describing the procedures and rules involved in the communication process and the software which controls computers communication. Discussion on network architectures, design principles, basic protocol suites, and the concept of internetworking.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0447 or COE 0447) and (CS 0449 or COE 0449); (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)

CS 1653 - APPLIED CRYPTOGRAPHY AND NETWORK SECURITY

Minimum Credits: 3
Maximum Credits: 3
This course will provide the necessary conceptual background and hands-on experience to understand the most common cryptographic algorithms and protocols and how to use them to secure computers networks and distributed applications. Topics include: cryptographic algorithms for data confidentiality, authentication, and integrity, user authentication methods (secure tokens and biometrics), internet security protocols, security in local area networks, firewalls, and intrusion detection systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (CS 0449 or COE 0449) and (CS 1501 or COE 1501) or (CS 0458 or CS 1750); (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)

CS 1655 - SECURE DATA MANAGEMENT AND WEB APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
The main objectives for this course are: (1) to study in more depth query optimization and security, (2) to study advanced topics; data mining, information retrieval, and web data management, and (3) to expose students to advanced data and information management technologies, while gaining hands-on experience. These include mobile data management, continuous queries and their applications in areas such as biomedical informatics and e-commerce.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 0441 and (CS 0445 or COE 0445); (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)

CS 1656 - INTRODUCTION TO DATA SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course aims to expose students to different data management, data manipulation, and data analysis techniques. The class will cover all the major data management paradigms (relational/SQL, XML/Xquery, RDF/SPARQL) including NOSQL and data stream processing approaches. Going beyond traditional data management techniques, the class will expose students to information retrieval, data mining, data warehousing, network analysis, and other data analysis topics. Time permitting, the class will include big data processing techniques, such as the map/reduce framework.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 1501 or COE 1501 (MIN GRADE 'C' or Transfer For All Listed Coures)

CS 1660 - INTRODUCTION TO CLOUD COMPUTING

Minimum Credits: 3
Maximum Credits: 3
Cloud computing has emerged as a new paradigm for efficient and highly elastic delivery of computing services over the Internet to achieve economies of scale. The course will explore the concept of Cloud Computing, considering both its benefits and challenges. The course will also cover the basic design principles and architectures of Cloud Computing, including its usability and utility to deliver efficiently and flexibly infrastructure, platform and software as a service. Topics include types of public, private and hybrid cloud computing services, data centers architecture and deployment, cloud computing programming models, virtualization and virtual networking and storage, and large-scale distributed processing framework to manage, process and store big data applications running in clustered systems. The course will also include hands-on projects focused on developing applications on a MapReduce and Hadoop cluster. Upon successfully completing the course of the course, students will gain understating of the goals, benefits and models of cloud computing, and how storage, processing and services are designed and managed in a virtualized environment. Through hands-on projects, students will demonstrate proficiency in deploying and evaluating cloud computing applications and services. They will be able to design and deploy data-centered applications and services, and efficiently use frameworks and tools for data analytics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CS 1550: Intro to Operating Systems; MIN GRADE: C or Transfer

CS 1666 - PRINCIPLES OF COMPUTER GAME DESIGN AND IMPLEMENTATION

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to give an introduction and insight into designing and implementing video games. This course questions the nature, intent, and motivation of games and how to construct a compelling experience for users. It is a project-based course, with a final project being to make a game with a small team.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CS 1501 or COE 1501; (MIN GRADE 'C' or Transfer)

CS 1671 - HUMAN LANGUAGE TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to the field of natural language processing (NLP) - the creation of computer programs that can understand, generate, and learn languages used by humans. It will expose students to real-world applications such as speech recognition, information retrieval, dialogue agents, question answering systems, and machine translations by means of computational techniques including search algorithms, dynamic programming, hidden Markov models, probabilistic context free grammars, and related machine learning algorithms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 1501; (MIN GRADE 'C' OR TRANSFER)

CS 1674 - INTRODUCTION TO COMPUTER VISION

Minimum Credits: 3
Maximum Credits: 3
In this class, students will learn the basics of modern computer vision. The course will cover topics such as image filtering, edge detection, feature extraction, description and matching, grouping and clustering, object detection, activity recognition, and recognition with a human in the loop.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 1501 or COE 1501 (MIN GRADE 'C' OR TRANSFER)

CS 1675 - INTRODUCTION TO MACHINE LEARNING

Minimum Credits: 3
Maximum Credits: 3
This introductory machine learning course will give an overview of many models and algorithms used in modern machine learning, including linear models, multi-layer neural networks, support vector machines, density estimation methods, bayesian belief networks, clustering, ensemble methods, and reinforcement learning. The course will give the student the basic ideas and intuition behind these methods, as well as, a more formal understanding of how and why they work. Through homework assignments students will have an opportunity to experiment with many machine learning techniques and apply them to various real-world datasets.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CS 1501 or COE 1501 and (STAT 1000 or 1100 or 1151 or ENGR 0020) (Min Grade 'C' or Transfer for All Listed Courses)

CS 1699 - SPECIAL TOPICS IN COMPUTER SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This is a special topics course that allows the computer science department to test run a course before deciding whether to permanently add it to our curriculum.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CS 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
This course places the student in an "on-the-job" setting in which he/she receives practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

CS 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course is designed to give students the opportunity to design a plan of study to be agreed upon by the student and a supervising faculty member. This course does not satisfy the computer science capstone requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

CS 1906 - COMPUTER SCIENCE COOPERATIVE PROGRAM

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Capstone Course

CS 1950 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 3
This course is designed to give students the opportunity to design a plan of study to be agreed upon by the student and a supervising faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

CS 1980 - TEAM PROJECT DESIGN AND IMPLEMENTATION

Minimum Credits: 3
Maximum Credits: 3
Students will choose a project from proposals provided by our faculty and industry partners. Teams will consist of 3 or 4 students and they will be supervised by a project mentor. This course satisfies the capstone requirement.

Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: CS 1550; PLAN: Computer Science (CS-BS, CSCI-BS); (MIN GRADE 'C' OR TRANSFER FOR ALL COURSES LISTED)
Course Attributes: Capstone Course

Computing and Information

CMPINF 0000 - COMPUTING AND INFORMATION TRANSFER

Minimum Credits: 0
Maximum Credits: 99
This course is to be used for the transfer of non-articulated courses in the area of Computing and Information.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CMPINF 0001 - SCI FIRST-YEAR SEMINAR

Minimum Credits: 1
Maximum Credits: 1
The first-year seminar will provide students with an introduction to SCI and the University of Pittsburgh. The format of this course will be mixed between large group informational sessions, and small group discussions and activities. The small group sections will be led by members of our advising staff, undergraduate peer mentors, and/or faculty. The course will be split approximately evenly between large-group informational sessions and small-group discussions.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit
Course Requirements: PROG: School of Computing and Information

CMPINF 0010 - BIG IDEAS IN COMPUTING AND INFORMATION

Minimum Credits: 4
Maximum Credits: 4
Computing and information systems underlie nearly every facet of life in today's highly-networked societies. Accordingly, there are many paths through the degree programs offered by the School of Computing and Information, each focusing on different aspects of the theories, practices, and applications of computing and information. This course will introduce students to a variety of core principles and important themes that cross-cut this array of computing- and information-oriented disciplines, as well as explore the types of work that individuals educated in these disciplines engage in.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CMPINF 0070 - STUDY ABROAD: SCIENCE SEQ

Minimum Credits: 1
Maximum Credits: 5
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

CMPINF 0401 - INTERMEDIATE PROGRAMMING

Minimum Credits: 4
Maximum Credits: 4
This is an intermediate programming course that focuses on programming via an object-oriented paradigm. Students entering CMPINF 0401 are expected to have some previous concepts and then focus on object-oriented programming, including classes, encapsulation and abstraction, inheritance, polymorphism and interfaces. Some introductory data structures and algorithms will also be covered in this course.This class is a programming-intensive course, and students will be expected to complete several non-trivial programming projects throughout the term.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: ANTI-REQ: Enrollment not permitted if previously enrolled in CS 0401 OR INFSCI 0017.

CMPINF 0999 - SPECIAL TOPICS IN COMPUTING AND INFORMATION

Minimum Credits: 3
Maximum Credits: 3
Various topics in computing and information will be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CMPINF 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN

Minimum Credits: 3
Maximum Credits: 3
How are computational artifacts currently designed, and how can they be designed differently? What stories can be told by collaborating with computers? What stories can't be told? This project-based course will enable students to engage with and create computational narratives and interactive projects with data, hardware and algorithms. Each collaboratively taught iteration of the course will include 3-4 of these units, such as: fabrication, interactive hardware, computational narrative, interactive data, and prototyping. Students will consider what it means to compose with computers for human audiences, and with humans for computer audiences. Designed for Digital Narrative and Interactive Design (DNID) majors to take midway through the major, it will help students consolidate the interdisciplinary knowledge they have obtained in their prerequisite courses, introduce them to examples of interdisciplinary work that will inform their later capstone projects, and give them practice in working on collaborative projects that span the humanities and information/computing fields.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ENGCMP 0425, OR HAA 0425, OR ENGLIT 0512) AND (CS 0010, OR CS 0011, OR CS 0012, OR CS 0007, OR CS 0008, OR INFSCI 0419)

CMPINF 1205 - COMPARATIVE DIGITAL PRIVACIES

Minimum Credits: 3
Maximum Credits: 3
This course will offer a broad survey of significant issues relating to privacy in the digital age. It investigates privacy in the digital world from cultural, social, communication, and policy perspectives. Taking a comparative approach, privacy related to digital communication is compared across several global regions in an attempt to understand the distinctiveness of privacy in those regions. The course will first introduce students to the concepts of privacy, the digital age, and the relation between privacy protections and the state. Students will understand the significance of the issue of digital privacies and why we need to employ a comparative approach to examine it. The course will then look at selected case studies of digital privacy in several global regions, including the United States, Canada, Europe, China, and South East Asia. Issues related to digital privacies such as Internet laws and policies, media regulations and public interest, data protection, state control, and commercial interests in the digital age, surveillance, copyright, and privacy advocates will also be included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

CMPINF 1981 - PROJECT STUDIO

Minimum Credits: 3
Maximum Credits: 3
This course is designed as a practicum for the joint degree programs offered by the School of Computing and Information in conjunction with other units on campus. Students will apply skills learned during their studies in SCI to problems existing at the confluence of computing, information, and other disciplinary studies. This course is meant to help satisfy the Capstone requirement for joint programs allowing team-based project Capstone options.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit

CMPINF 1999 - ADVANCED SPECIAL TOPICS IN COMPUTING AND INFORMATION

Minimum Credits: 3
Maximum Credits: 3
Various advanced topics in computing and information will be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Cross-Registration

CARLOW 0001 - CROSS-REGISTRATION

Minimum Credits: 0.5
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh Council of Higher Education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate full-time students at any of the 10 participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

CCAC 0001 - CROSS-REGISTRATION

Minimum Credits: 0.5
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate and graduate full-time students at any of the 10 participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

CHATHM 0001 - CROSS-REGISTRATION

Minimum Credits: 0.5
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate full-time students at any of the ten participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

CMU 0001 - CROSS-REGISTRATION

Minimum Credits: 0.5
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate and graduate full-time students at any of the 10 participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

DUQU 0001 - CROSS-REGISTRATION

Minimum Credits: 0.5
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate and graduate full-time students at any of the 10 participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD

Course Component: Lecture
Grade Component: No Grade Required

LAROCH 0001 - CROSS-REGISTRATION

Minimum Credits: 0.5
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate full-time students at any of the 10 participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

PNTPRK 0001 - CROSS-REGISTRATION

Minimum Credits: 0
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate full-time students at any of the 10 participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

PTSEM 0001 - CROSS-REGISTRATION

Minimum Credits: 0
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate full-time students at any of the ten participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

RMC 0001 - CROSS-REGISTRATION

Minimum Credits: 0
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh council of higher education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate full-time students at any of the ten participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

STVC 0001 - CROSS-REGISTRATION

Minimum Credits: 0
Maximum Credits: 12
The purpose of cross-registration through the Pittsburgh Council of Higher Education (PCHE) is to provide opportunities for enriched educational programs by permitting undergraduate full-time students at any of the 10 participating colleges and universities to take courses at any other PCHE institution.
Academic Career: UGRD
Course Component: Lecture
Grade Component: No Grade Required

Dental

DENT 1917 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

Dental Hygiene

DENHYG 1000 - FULL-TIME DENTAL HYGIENE STUDY

Minimum Credits: 0
Maximum Credits: 0
Students who are working full-time toward the Associate of Science Degree in Dental Hygiene may register for this course.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: No Grade Required
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1017 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This directed study is designed for the dental hygiene student who desires to pursue interests in specific area(s). The content of the course is specified by the student and approved by the course director and program director. The teaching format is designed to teach the student specific knowledge or skills using enhanced faculty instruction and personal contact.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1047 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This directed study is designed for the dental hygiene student who desires to pursue interests in specific area(s). The content of the course is specified by the student and approved by the course director and program director. The teaching format is designed to teach the student specific knowledge or skills using enhanced faculty instruction and personal contact.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1077 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This directed study is designed for the dental hygiene student who desires to pursue interests in specific area(s). The content of the course is specified by the student and approved by the course director and program director. The teaching format is designed to teach the student specific knowledge or skills using enhanced faculty instruction and personal contact.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1110 - BIOLOGICAL SCIENCES 1

Minimum Credits: 2
Maximum Credits: 2

This introductory level course is the first of 3 sequential courses in the biological sciences, each of which represents an interdepartmental integration of gross and neuroanatomy, histology and physiology. Through lectures and assigned readings, students will gain insight into structure-function relationships of cells, tissues, organs, and organ systems of the body. This course deals with the cell, epithelium, connective tissue, the skeletal system, myology, blood, the lymphatic system, neural histology, and introductory neural physiology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1112 - INTRODUCTION TO DENTAL HYGIENE

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce dental hygiene students to the techniques and information necessary for comprehensive patient care.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1113 - INTRODUCTION TO DENTISTRY

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the activities of each dental specialty; also, it may include oral anatomy, dental materials and dental charting. The lectures introduce the student to the content and scope of each specialty area; the services delivered with emphasis on dental hygiene interaction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1114 - DENTAL ANATOMY

Minimum Credits: 2
Maximum Credits: 2
This course is designed to help students identify the normal structures with the oral cavity. The use of correct terminology is stressed in order to effectively communicate with members of the dental profession. The student will be able to differentiate normal formation of teeth from abnormalities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1116 - DENTAL HYGIENE PRECLINIC

Minimum Credits: 2
Maximum Credits: 2
Dental hygiene preclinic is established as the preclinical time for students to observe, discuss, and practice the skills required to perform the oral prophylaxis. Each student works and progresses at his/her own rate and must demonstrate consistent mastery of the skills taught.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1117 - CHEMISTRY, BIOCHEMISTRY AND NUTRITION

Minimum Credits: 5
Maximum Credits: 5
The course is designed to give the students the fundamental principles and concepts of chemistry, biochemistry and nutrition as they are related to physiological and pathological aspects of oral health and the practice of dental medicine. The course is not designed to make the student an expert in chemistry, biochemistry and nutrition but rather to provide the basic principles of these sciences which will enable the student to more effectively manage oral disease.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1241 - PRINCIPLES OF MICROBIOLOGY

Minimum Credits: 3
Maximum Credits: 3
An introductory course in microbiology for dental hygiene students with no previous background in microbiology. Major areas included are microorganisms, immune mechanisms of the host and the interaction of the host and the microorganisms in disease and homeostatis. Major emphasis is placed on diseases with oral manifestations and infection control in dental medicine. The laboratory component is devoted to microbiological methods, infection control and oral ecology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1242 - BIOLOGICAL SCIENCES 2

Minimum Credits: 3
Maximum Credits: 3
This introductory level course is the second of three sequential courses in the biological sciences. Through lectures and assigned readings, students will gain insight into structure-function relationships of cells, tissues, organs, and organ systems of the body. This course deals with the gross anatomy, neuroanatomy and physiology of the nervous system, including the eye and ear, the cardiovascular system, and the oral cavity with emphasis on the formation and structure of the teeth.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1244 - COMMUNICATIONS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to increase the student's proficiency as a public speaker, through learning organization of material, delivery and criticism of speeches.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1245 - DENTAL HYGIENE RADIOLOGY 1

Minimum Credits: 2
Maximum Credits: 2
This course provides the student with the theoretical knowledge required to achieve a working knowledge of the radiologic sciences as they apply to dental hygiene. Also included will be concepts of radiation safety and radiation biology. An introduction to normal radiographic anatomy and the radiographic aspects of dental pathology will be included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1246 - MICROBIOLOGY LAB

Minimum Credits: 0
Maximum Credits: 0
Content is devoted to the development of student's basic laboratory skills, application of microbiological methods and will emphasize performance, scientific investigation and safety.
Academic Career: Undergraduate
Course Component: Practicum

Grade Component: No Grade Required
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1247 - DENTAL HYGIENE SEMINAR 1

Minimum Credits: 1
Maximum Credits: 1
This course is an extension of the introduction to dental hygiene course. The focus of this course is the special needs and medically compromised patient. It combines lectures, guest presentations and clinical experiences. The students will acquire greater understanding of the psychological and physiological needs of these patients and how to better meet those needs to provide the best patient care.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1248 - DENTAL MATERIALS

Minimum Credits: 2
Maximum Credits: 2
This course introduces the dental hygiene student to the field of dental materials. The methods of instruction include didactic and laboratory components. Lectures will cover basic properties of dental materials; gypsum products, waxes, rigid and elastic impression materials and restorative materials. Laboratory sessions give each student practical experience in the proper manipulation of these materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1249 - DENTAL HYGIENE CLINIC 1

Minimum Credits: 2
Maximum Credits: 2
This course is scheduled as clinical sessions in which students utilize the skills necessary to perform an oral prophylaxis on individual patients, and to provide patient education.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1370 - INTRODUCTION TO CLINICAL PERIODONTICS

Minimum Credits: 3
Maximum Credits: 3
This course concerns the healthy periodontium, changes with aging, and changes to disease. Classification of periodontal diseases, etiology, histopathology and prevention are discussed. This course teaches the student the role of the hygienist in clinical management, treatment and control of periodontal disease.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1372 - GENERAL AND ORAL PATHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course in general and oral pathology is designed to give the dental assistant and oral hygiene student as broad a background as possible in both general and systemic diseases, as well as special emphasis on the oral manifestations of these conditions. Additional emphasis is placed on those diseases which are specifically related to the Oro Dental complex. Primary emphasis is placed on the clinical and behavioral manifestations of disease as they relate to pathological processes. Moreover, the radiologic aspects of specific diseases are emphasized where appropriate.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1373 - BIOLOGICAL SCIENCES 3

Minimum Credits: 3
Maximum Credits: 3
This introductory level course is the third of three sequential courses in the biological sciences, each of which represents an interdepartmental integration of gross and neuroanatomy, histology, and physiology. Through lectures and assigned readings, students will gain insight into structure-function relationships of cells, tissues, organs and organ systems of the body. This course deals with the gross anatomy, histology, and physiology of the respiratory, digestive, urinary, and endocrine systems. Wound healing is covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1375 - ANESTHESIA FOR DENTAL HYGIENIST

Minimum Credits: 2
Maximum Credits: 2
This course introduces the student to the entire spectrum of pain and anxiety control techniques currently in use in dentistry. Emphasis is placed on the basic physiology of the pain phenomena and the relevant clinical pharmacology of local anesthetics. The general topic of preoperative patient assessment is integrated with a practical and systematic approach to the recognition, management, and prevention of specific medical emergencies that may occur in a dental office.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1376 - DENTAL HYGIENE RADIOLOGY 2

Minimum Credits: 1
Maximum Credits: 1
This course is designed to increase the radiographic interpretation skills of the second year dental hygiene student through the use of critical thinking exercises and an in depth exposure to radiographs illustrating caries, periodontal diseases, trauma and pulpal involvement. Radiographic case formatted questions and exercises will be reviewed to enable students to correlate the pathology content of the curriculum as well as the interpretation of normal and ab normal oral structures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1377 - DENTAL HYGIENE SEMINAR 2

Minimum Credits: 1
Maximum Credits: 1
This course is an extension of the introduction to dental hygiene course. The focus of this course is the special needs and medically compromised patient. It combines lectures, guest presentations and clinical experiences. The student will acquire greater understanding of the psychological and physiological needs of these patients and how to better meet those needs to provide the best patient care.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1379 - DENTAL HYGIENE CLINIC 2

Minimum Credits: 3
Maximum Credits: 3
This course is scheduled as clinical sessions in which the student integrates and applies knowledge and concepts learned in previous courses to provide comprehensive dental hygiene care to individual patients.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1411 - DENTAL PHARMACOLOGY

Minimum Credits: 2
Maximum Credits: 2
This course provides oral hygiene students with the opportunity to become familiar with pharmacotherapeutics as utilized by all health professionals. All drug groups are considered in order to familiarize students with the dental patient's therapeutic status. The therapeutics and adverse effects of the drugs are discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1412 - PUBLIC HEALTH DENTISTRY

Minimum Credits: 3
Maximum Credits: 3
Public health dentistry is that portion of the dental hygiene curriculum which prepares students to promote oral health and prevent oral disease in the community through organized community based programs. It provides students with a broad understanding of the social, political, and economic forces directing the system. The approach taken within this course provides students with knowledge and skills necessary to meet specific dental health needs of community groups as distinct from the traditional clinical approach which is designed to meet the needs of individuals.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1414 - GERONTOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will provide the student with an introduction to the phenomenon associated with our aging society. It will also familiarize the student with the special needs of the elderly patient. It will provide background information as to why these needs will be important to the health care professionals of the future. The methods used will be lecture, discussion, partner and group exercise, awareness assignments and simulations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1417 - DENTAL HYGIENE SEMINAR 3

Minimum Credits: 1
Maximum Credits: 1
This course is designed to compliment the dental hygiene 3 clinical experience. Students will be exposed to various traditional and non-traditional dental therapeutic techniques including, but not limited to subgingival irrigation with antimicrobial agents, an update of new dental products and devices as well as the presentation of case studies for analyses. The goal of the course is to enhance the clinical and didactic skills of the dental hygienist.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1419 - DENTAL HYGIENE CLINIC 3

Minimum Credits: 4
Maximum Credits: 4
This course provides clinical sessions in which the student's integrate and apply knowledge and concepts learned in previous courses to provide comprehensive dental hygiene care to individual patients.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1420 - ETHICS HEALTH CARE PROFESSIONAL

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce health-care professionals to the principles of ethics. Various aspects of ethics will be discussed including the decision making process on which evaluation is based.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1421 - SPECIAL NEEDS DENTISTRY

Minimum Credits: 1
Maximum Credits: 1
The goals of this course are to introduce the dental/dental hygiene student to common developmental and acquired disabling conditions and issues related to the dental care of patients with special needs. The material presented will aid the student in assessing, planning, implementing and monitoring treatment for the patient with special needs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1422 - HEALTH PROMOTIONS THROUGH THE LIFE SPAN

Minimum Credits: 3
Maximum Credits: 3
This course will examine common health issues found throughout the human lifespan with the intention of exposing students to a holistic perspective of their clinical patient experience. Students will discover and discuss the perceptions and realities of issues such as emerging populations, age specific health issues that are influenced by environmental and social factors and their responsibility as an ethical clinician to promote health throughout the lifespan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1544 - INTRODUCTION TO RESEARCH ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to make students aware of important aspects of research in the dental profession. Statistical principles necessary for reading and evaluating research articles will be closely examined. This course provides the knowledge and critical thinking skills necessary to analyze and evaluate research articles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1545 - DENTAL HEALTH EDUCATION, METHODS AND PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This course is an introduction to classroom teaching for the dental hygienist. It involves the acquisition of knowledge and skills for classroom instruction in dental health education. Emphasis is placed on preparation, implementation and evaluation of lesson plans and the design and selection of effective audio-visual aids. It includes six weeks of dental health presentations in the community exhibiting the skills acquired the first half of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1547 - DENTAL HYGIENE SEMINAR 4

Minimum Credits: 1
Maximum Credits: 1
This course was designed to synthesize pertinent clinical and basic science information. In addition, students will be required to analyze and present a periodontal case study for peer review.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1549 - DENTAL HYGIENE CLINIC 4

Minimum Credits: 5
Maximum Credits: 5
This course was designed to facilitate the synthesis and application of information using a multidisciplinary approach for patient treatment. The clinical environment stimulates and prepares students for a private practice dental setting. All students are afforded the opportunity to participate in internal and external clinical rotations in the capacity of a dental auxiliary. Each student's clinical competency level is assessed and evaluated during all phases of patient treatment.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1682 - BASIC PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is an intensive introduction to the application of behavioral theory and intervention for health professionals. Topics include learning theory, assessment, respondent and operant behavior modification, theories of anxiety, stress, and fear, and behavior change strategies for these responses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1689 - ADVANCED CLINICAL DENTAL HYGIENE PRACTICE

Minimum Credits: 2
Maximum Credits: 2
This course is designed to increase the proficiency and self-direction of the dental hygiene student. The assessment of patient's oral health status, planning and provision of preventive services and the identification of the need for referrals will be stressed. This will enable the student to develop fundamental skills which are necessary for various career options in the dental profession.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1901 - ALLIED HEALTH EDUCATION

Minimum Credits: 3
Maximum Credits: 3
His course provides the student with knowledge and experience in classroom and clinical dental education. Emphasis is placed on the development of objectives and instructional units, teaching methods, learner characteristics, learning styles and conditions, instructional resources, utilization of media, and the evaluation process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1902 - ALLIED HEALTH EDUCATION PRACTICUM

Minimum Credits: 3
Maximum Credits: 3

This course provides the student with practical experience in both the dental hygiene classroom and clinical settings.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1903 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows the student in conjunction with their advisor to expand their knowledge and experience in the identified area of interest. Projects to be determined by the student and approved by the advisor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1904 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows the student in conjunction with their advisor to expand their knowledge and experience in the identified area of interest. Projects to be determined by the student and approved by the advisor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1921 - HEALTH MANAGEMENT SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This seminar course is designed to provide the student with a broad based understanding of the health care delivery system. Emphasis will focus on leadership, management, quality assurance, development of dental health programs, and current health care delivery issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1922 - HEALTH MANAGEMENT PRACTICUM

Minimum Credits: 3
Maximum Credits: 3
This course provides the student through a variety of field experiences with the opportunity to apply the knowledge gained in the health management seminar.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1923 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows the student in conjunction with their advisor to expand their knowledge and experience in the identified area of interest. Projects to be determined by the student and approved by the advisor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: H/S/U Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1924 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows the student in conjunction with their advisor to expand their knowledge and experience in the identified area of interest. Projects to be determined by the student and approved by the advisor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1945 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows the student in conjunction with their advisor to expand their knowledge and experience in the identified area of interest. Projects to be determined by the student and approved by the advisor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

DENHYG 1947 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows the student in conjunction with their faculty advisor to expand their knowledge and experience in the area of dental hygiene education. Projects to be determined by the student and approved by the advisor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: School of Dental Medicine (Undergraduate)

Dental Pharmacology

DSPHL 1010 - DENTAL PHARMACOLOGY

Minimum Credits: 2
Maximum Credits: 2
This course provides oral hygiene students with the opportunity to become familiar with pharmacotherapeutics as utilized by all health professionals. All drug groups are considered in order to familiarize students with the dental patient's therapeutic status. The therapeutics and adverse effects of the drugs are discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Economics

ECON 0100 - INTRODUCTION TO MICROECONOMIC THEORY

Minimum Credits: 3
Maximum Credits: 3
Introduction to principles of economic analysis as applied to the study of prices and markets. The course builds a theoretical basis for understanding producer and consumer behavior, and prepares students to appreciate the importance of markets in our economic system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ECON 0110 - INTRODUCTION TO MACROECONOMIC THEORY

Minimum Credits: 3
Maximum Credits: 3
An introductory course which develops the basic tools needed to analyze the behavior of various macroeconomic phenomena including inflation, gross domestic product, and unemployment. In addition, these tools are used to study how and whether the government can impact the behavior of the overall economy. Finally, the course looks at the role various institutions such as banks and the stock and bond markets play in affecting the economic environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ECON 0150 - ECONOMIC DATA ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
An introduction to economic data and statistical concepts. Topics covered include: measures of location and dispersion and introduction to probablility theory; characteristics of probability distributions; sampling theory, point estimation and hypothesis testing. Correlation analysis and the linear regression model are treated with special emphasis placed on the construction, estimation, and interpretation of economic models. Emphasis is placed on understanding and using statistical concepts rather than on proving theorems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ECON 0160 - INTRODUCTION TO ECONOMETRICS

Minimum Credits: 3
Maximum Credits: 3
Develop an understanding of basic econometrics. Teaches use of the computer for econometric and statistical analysis, and how to acquire information about published data on basic economic activity. Attempts to develop an understanding of the difficulties inherent in collecting and interpreting actual data. The heart of the course is the development of basic econometric skills. Learning about data sources and computer software will be included as the basic econometric theory is developed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ECON 0200 - GAME THEORY PRINCIPLES

Minimum Credits: 3
Maximum Credits: 3
This course introduces the basic concepts of game theory. The emphasis is on the unifying perspective that game theory offers to questions in economics, other disciplines, and everyday life. The course draws on a wide range of substantive and intellectually stimulating applications of game theory across areas in economics, other disciplines, and beyond. It will enable students to view social interactions as strategic games, to use game theoretic concepts to predict behavior in these interactions and to conceive of ways in which altering the game affects social outcomes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ECON 0220 - INTRO TO HEALTH ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
This course applies microeconomic analysis to the allocation of resources and consumption of products within the health care economy. It will allow students to develop an understanding of microeconomic theory, in particular as it is applied to real world problems. Also it will provide students with knowledge of the economic aspects of health care in the US and related policy. Unique features of health care which interfere with competitive market allocation and pricing will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100; MIN GRADE 'C' for all courses

ECON 0230 - INTRODUCTION TO PUBLIC ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
The objectives of this course are - to illustrate how basic economic principles can be used to determine the economic effects of government expenditure and tax policies; to develop the students' ability to analyze issues and to recognize the value judgments which lie behind various positions taken in current policy debates.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100 or 0800
Course Attributes: Urban Studies

ECON 0280 - MONEY AND BANKING

Minimum Credits: 3
Maximum Credits: 3
The course is directed toward giving the student an insight into the role that monetary policy and financial markets play in the economy. It will cover both the theoretical and institutional aspects of banking necessary to function successfully in the business world. One object of the course is to give the student the ability to analyze and appraise critically the monetary policy of federal reserve system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0110 or 0800 (MIN GRADE 'C')
Course Attributes: Urban Studies

ECON 0290 - FINANCIAL MARKETS AND INSTITUTIONS

Minimum Credits: 3
Maximum Credits: 3
This course will provide the student with a strong foundation in financial market analysis and the roles of non-bank financial institutions in the modern economy. The course covers financial markets such as debt markets, equity markets, and derivatives markets and non-bank financial institutions, including mutual funds, pension funds, securities firms, and insurance companies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0110 AND (STAT 0200 OR STAT 1000 OR STAT 1100 OR STAT 1152 OR ECON 0150 OR ECON 1150)

ECON 0360 - INTRODUCTION TO ENVIRONMENT AND RESOURCE ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
Basic economic theory applied to issues involving joint interaction of economic activity, the environment, and use of natural resources. Debate over the sustainability of economic development, renewability and/or depletion of natural resources, and effects of pollution on environmental quality will be surveyed. The issues of ozone depletion, loss of biodiversity, and greenhouse gas emissions and global warming will be considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100 or 0800
Course Attributes: Global Studies

ECON 0400 - LABOR AND THE ECONOMY

Minimum Credits: 3
Maximum Credits: 3
An introductory survey of contemporary labor developments and issues. Readings and lectures have a more historical and institutional perspective and less emphasis on analytical techniques than other labor offerings.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100 or 0800 (Min Grade 'C')

ECON 0410 - ECONOMICS OF DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
This course aims to strengthen students' understanding of how race, class, gender, disability, ethnicity, nationality, culture, sexuality, religion, and age interact with public policies to influence various economic outcomes. We analyze the evolution of economic consequences on populations that have been historically disadvantaged. Specifically, we discuss how governments (especially the U.S. government) and societies deal with diversity and their level of discrimination vs inclusivity of different groups over time and across space.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100

ECON 0430 - WOMEN IN THE LABOR MARKET

Minimum Credits: 3
Maximum Credits: 3
The empirical evidence suggests that women earn lower income than men, and that the wage rates earned by women are lower than those of men --- even when they have similar job classifications. This course examines the role of women in the labor market; the nature of their decision to invest in education, their labor force participation, and the demand for their labor services. In this way, a framework for policy analysis is developed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100 or 0800

ECON 0460 - SPORTS ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is for students to understand and apply the concepts of microeconomics that are relevnt for the business and practice of sports. Areas of study include labor economics, public economics, industrial organization, the economics of information, and the economics of sports betting markets. Examples of questions addressed within these fields include: how have owners in professional sports leagues coordinated to limit player salaries? How much are players worth, in an economic sense? What pricing strategies can teams employ to maximize profits?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100; MIN GRADE: C

ECON 0500 - INTRODUCTION TO INTERNATIONAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
Provides an introduction to international economics. Half the topics are pure theory, half international monetary economics. Topics from the real world are analyzed. Topics include alternative pure trade theories; effects of trade barriers; U.S. commercial policy; forms of regional integration; balance of payments; elimination of balance of payments disequilibrium; international monetary system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ECON 0100 and 0110) or 0800 (MIN GRADE 'C')
Course Attributes: Asian Studies, DSAS Global Issues General Ed. Requirement, Global Studies, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ECON 0501 - INTRODUCTION TO INTERNATIONAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
An introduction to the basic issues of international economics and to the historical evolution and institutional structure of the international economy. Topics include mercantilism, comparative advantage as a basis for trade, the impact of trade on income distribution, the evolution of the international financial system, and the working of the international gold standard.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

ECON 0530 - INTRODUCTION TO DEVELOPMENT ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
An introductory description and analysis of the economic systems of countries commonly referred to as less developed countries. Alternative development policies with respect to international trade, agriculture, industry, health, and education will be outlined. The roles played by government, population growth, environmental degradation, income distribution, and foreign aid will be discussed. The economic aspects of development will be stressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ECON 0100 and 0110) or ECON 0800 (MIN GRADE 'C')
Course Attributes: African Studies, Asian Studies, DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ECON 0630 - EAST ASIA'S DYNAMIC ECONOMIES

Minimum Credits: 3
Maximum Credits: 3
An introductory survey of several East Asian economies. The primary objective is to equip students with a clear understanding of major elements of recent Asian economic history and current economic conditions, and of implications of Asian economic gains for the United States economy, particularly U.S. Trade relationships with this region and their dynamically changing patterns. A secondary objective is to use case studies and empirical materials as vehicles to appreciate how economic principles can be used in real world analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECON 0100 and 0110) or ECON 0800; MIN GRADE: 'C' for all listed Courses; PLAN: Economics (ECON-BA), Economics (ECON-BS), Economics-Statistics (ECNSTC-BS), Mathematics-Economics (M-ECON-BS)
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ECON 0640 - ECONOMIC DEVELOPMENT OF THE MIDDLE EAST AND NORTH AFRICA (MENA) REGION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to expose students to current views by academics and policy makers on past practices and future challenges facing the economies of the Mena region. The course will be taught with an interdisciplinary emphasis on political, social, and cultural, as well as economic aspects. Assignments will include a research paper in addition to a group project presentation. Students will gain an overall understanding of the economic problems of the region, and will be able to effectively analyze changes in the economic climate of the region.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ECON 0800 - INTRODUCTION TO ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
A one-term course designed primarily for the non-major. The main goals are to create interest in the study of economics and introduce some basic tools economists use to analyze social issues. Issues range from farm subsidies to changes in income tax rates to changes in spending on crime reduction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ECON 0900 - PROFESSIONAL DEVELOPMENT FOR ECONOMISTS

Minimum Credits: 1
Maximum Credits: 1
In this course, students will 1) understand the range of career and advanced degree options for which their studies in Economics will make them eligible. 2) develop professional skills in presentation and communication. 3) maximize progress within the major by setting broader academic and career goals and exploring learning opportunities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: RESTRICTED TO ECON PLANS: ECON-BA; ECON-BS; ECNSTC-BS; M-ECON-BS

ECON 0905 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Current topics of particular interest to economics majors are discussed and analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100; MIN GRADE: C or better

ECON 1010 - AMERICAN ECONOMIC HISTORY

Minimum Credits: 3
Maximum Credits: 3
The course presents a survey of the strategic factors in the economic development of the United States from colonial times to the great depression. The topics covered include the record of economic growth, the process industrialization and its major phases, British mercantilism, the role of technological change, demographic history, the slave economy, distribution of income, urbanization, and the financial sector.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100 or 0800 (MIN GRADE 'C')
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ECON 1030 - INTELLCL FOUNDTNS OF CAPITALISM

Minimum Credits: 3
Maximum Credits: 3
This course explores the salient features of European economic development from the black plague of the middle ages to the great depression of the 1930's. The emphasis will be to understand how social, demographic, and economic processes interacted and ultimately culminated in one of the most momentous events in the history of mankind, the industrial revolution. We shall venture an explanation for why Europe was the first continent and England the first country to industrialize. The social changes in the aftermath of the revolution will also be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ECON 1050 - SOCIALISM VERSUS CAPITALISM

Minimum Credits: 3
Maximum Credits: 3
The course covers the economic changes that produced capitalism; the attempts to understand capitalism which culminated in the theories of Adam Smith; the problems of communist societies and their attempts to return to some form of capitalism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Russian & East European Studies, West European Studies

ECON 1100 - INTERMEDIATE MICROECONOMICS

Minimum Credits: 3
Maximum Credits: 3

An intermediate-level course in resource allocation theory emphasizing the origins and uses of theoretical reasoning in economic analysis. Topics covered include the methodology of economic analysis; theories of consumer behavior; demand and supply analysis; production theory; the theories of the firm and market behavior; income distribution theory; and general equilibrium theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100 and 0110; CREQ: [MATH 0120(MIN GRADE B) or 0220 or (0125 and 0126) or 0230 or 235]; MIN GRADE: 'C' For All Listed Courses
Course Attributes: Global Studies

ECON 1110 - INTERMEDIATE MACROECONOMICS

Minimum Credits: 3
Maximum Credits: 3
A systematic treatment of macroeconomic analysis including such topics as policy analysis, inflation-unemployment tradeoffs, business cycles, budget deficits, and the balance of payments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 0100 and ECON 0110 and [MATH 0120 (with a B or higher) or 0220 or (0125 and 0126) or 0230 or 235]; MIN GRADE: 'C' For All Listed Courses
Course Attributes: Global Studies

ECON 1150 - APPLIED ECONOMETRICS 1

Minimum Credits: 3
Maximum Credits: 3
Introduces basic tools in applied econometrics that are commonly employed in government, business, and academic research. The main emphasis is on application of various econometric methods. Students are expected to become familiar with standard computer programs that are frequently used in quantitative economic research. Topics covered are a review of basic statistics, classical linear regression models, and associated inferential problems, and generalized linear regression models and associated inferential problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [MATH 0120(with a B or higher) or 0220 or (0125 and 0126) or (0230 or 0235)] and (STAT 0200 or 1000 or 1100 or 1152)

ECON 1160 - FINANCIAL ECONOMETRICS

Minimum Credits: 3
Maximum Credits: 3
Covers important advanced techniques and models frequently used in quantitative economic research in government, business, and academic institutions. Emphasis is on application. Among the subjects to be covered are distributed lag models, seemingly unrelated regression models, error components models, simultaneous equation models, and an introduction to the use and analysis of econometric models.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1150 OR STAT 1221

ECON 1180 - MATHEMATICAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
An initial course for graduate students or for undergraduates with a strong math background. Topics will include nonlinear and linear optimization models and simulation applications to economic problems. The optimization topics will include an introduction to activity analysis and Kuhn Tucker Theory. To facilitate the study of these, some topics concerning linear inequalities and convex functions will be discussed. Application of each topic to economic theory and policy will be stressed. The computer will be used for solving problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (MIN GRAD 'C') and [MATH 0120 or 0220 or (0125 and 0126) or 0230 or 235]

ECON 1200 - GAME THEORY

Minimum Credits: 3
Maximum Credits: 3
The aim of the course is to introduce the main elements of game theory, in a manner which emphasizes the connections between the "cooperative" and "non-cooperative" traditions. Students will be expected to develop understanding sufficient to construct proofs as well as to perform computations, and there will be emphasis on modelling issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0120(with a B or higher) or 0220 or (0125 and 0126) or 0230 or 235 and (STAT 0200 or 1000 or 1100); MIN GRADE: 'C' FOR LISTED COURSES

ECON 1230 - INTERMEDIATE PUBLIC ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
Fundamentals of policy analysis will be reviewed and then applied to a small set of current policy questions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (MINGRADE: 'C')

ECON 1250 - BEHAVIORAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
This course will expose students to how insights from psychology and experiments have been incorporated into economic models. We will discuss how the insights have changed our understanding of markets and auctions, strategic interactions (game theory), individual decision making under uncertainty and over time, political behavior and more. We will also explore the welfare and policy implications of the findings from behavioral economics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (Min Grad 'C')

ECON 1260 - EXPERIMENTAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
This course will expose students to the methodology and practice of experimental economics, where economic theories and hypotheses are tested and evaluated using data collected from controlled experiments. We will read and discuss a variety of different experiments that have been conducted including those examining markets and auctions, strategic interactions (game theory), individual decision making, political institutions and more.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ECON 1280 - MONETARY THEORY AND POLICY

Minimum Credits: 3
Maximum Credits: 3
Course focuses on financial system and important role it plays in facilitating growth in the U.S. Economy. Financial intermediaries are discussed with emphasis placed on the banking system and its regulator, the federal reserve system, the federal reserve's influence on money supply and interest rates and nonbank public's demand for money is discussed. Role of monetary policy in promoting price stability and economic growth discussed in the context of a U.S. Economy that is growing more integrated with worldwide economic events.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1110 (MIN GRADE 'C')

ECON 1290 - MONETARY POLICIES AND FINANCIAL MARKETS

Minimum Credits: 3
Maximum Credits: 3
The main goal of this course is to understand credit markets and monetary policy. Why are credit markets organized in a particular way? What forces shape financial contracts and the behavior of asset markets? Why do we need financial regulation? What is the role of central banks? How do they conduct monetary policy? How does monetary policy affect financial markets and the real economy? We will study how monetary policy influences interest rates and asset markets, such as the bond market and the stock market. We will analyze the effect of asymmetric information in corporate finance, and on the design of financial contracts. We will study the role of financial intermediaries, such as banks, in the economic system and study the economic rationale behind domestic and international banking regulation. Finally, we will discuss monetary policy. We will review evidence and theory on how monetary policy affects real economic activity and financial markets. We will study the instruments and goals of monetary policy, focusing in particular on credibility and expectations management for central banks, the connection with fiscal policy and international cooperation in monetary policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1110; MIN GRADE: C

ECON 1360 - ENVIRONMENTAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
Basic economic theory is applied to issues involving the joint interaction of economic activity, the environment, and use of natural resources. The debate over the sustainability of economic development, the renewability and/or depletion of natural resources, and the effects of pollution on environmental quality will be surveyed, including the issue of greenhouse gas emissions and global warming. Benefit-cost analysis, optimal tax and regulatory schemes, public goods, property rights, emission rights markets, and other economic policy instruments/concepts will be studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (MINGRADE: 'C')
Course Attributes: Global Studies

ECON 1420 - LABOR ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
This is an advanced elective course on labor economics for undergraduate students. The purpose of the course is to apply the analytical tools from intermediate microeconomic theory to analyze how society develops, allocates and rewards human resources, and to study a wide range of labor-related issues, such as labor supply; household production and labor force participation; labor demand; minimum wages; labor market discrimination; compensating wage differentials; schooling and earnings; wage inequality, and immigration. Emphasis will also be given to the empirical evidence on those topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (MINGRADE: 'C')

ECON 1440 - ECONOMICS OF CORPORATION FINANCE

Minimum Credits: 3
Maximum Credits: 3
The course is intended as an analysis of the investment valuation and financing of the corporation. Attention will be focused on the application of economic theory to the solution of financial problems. The interrelations between investment and financing policies and their dependence on security valuations will be stressed. The institutional background necessary to analyze these problems will be examined, and practical cases drawn from personal and business situations will be used along with more theoretical materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (MINGRADE: 'C')

ECON 1460 - FINANCIAL MARKETS & INSTITUTIONS

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to provide the student with a strong foundation in financial market analysis and the roles of nonbank financial institutions in the modern economy. This course will commence with the necessary background for financial market analysis, including methods of

valuation and the role of interest rates and monetary policy. The course will then cover three broad types of financial markets: debt markets, equity markets and derivatives markets. Each section will focus on the types of instruments and the markets in which they are traded, as well as methods of valuation of these asset classes. The course then investigates nonbank financial institutions, including mutual funds: pension funds, securities firms and insurance companies, paying close attention to their role in the previously-discussed markets.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ECON 1470 - MARKET STRUCTURE AND COMPETITION

Minimum Credits: 3
Maximum Credits: 3
The course is a survey of the behavior of firms, the structure of industrial markets, and market performance. The survey will cover both theoretical models and empirical analyses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (MINGRADE: 'C')

ECON 1480 - ECONOMICS OF INNOVATION

Minimum Credits: 3
Maximum Credits: 3
This course will engage undergraduate students in the discussion of new innovative technological solutions in finance and economics. The course will focus on the economics of blockchain and cryptocurrencies. We will cover the basics of blockchain such as the technology underlying blockchain, decentralized consensus, cryptography, smart property contracts, emerging regulation of blockchain and cryptocurrencies, and potential macroeconomic implications of these new technologies. The first part of the course will explore the economics of the incentives behind the functioning of blockchain. The second part will consider new economic and business applications that can be enabled by blockchain and cryptocurrencies as well as the challenges for the regulators of the financial industries. The course offers undergraduate students the opportunity to explore real-world challenges created for the governments and financial regulators by emerging financial and economic technology driven solutions and innovations, to understand the potential economic and business applications of blockchain and cryptocurrencies, and to study the mechanics and incentives behind security of blockchain. Students will have an opportunity to interview (via skype) economic policy makers and business innovators who work in the areas of blockchain and cryptocurrency. The students will also be able to chose a project of their interest and propose a design of an economic application on blockchain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ECON 1500 - INTERMEDIATE INTERNATIONAL TRADE

Minimum Credits: 3
Maximum Credits: 3
This course is an intermediate level survey of the theory of international trade and related evidence. Topics include causes and consequences of international trade, trade and income distribution, commercial policy, political economy aspects of trade policy, preferential trading arrangements (NAFTA, European Union, etc.), Trade and development, and others. While no one geographic area is singled out, examples will come from most areas of the world economy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (Min Grad 'C')
Course Attributes: Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ECON 1510 - INTERMEDT INTERNATIONAL FINANCE

Minimum Credits: 3
Maximum Credits: 3
This course provides an in-depth analysis of international monetary economics and related topics in the area of international finance. Topics to be covered include exchange rate determination, balance of payments, exchange market efficiency, forward exchange rates, effects of devaluation, the international monetary system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1110 (MIN GRADE: 'C')

Course Attributes: DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ECON 1540 - THEORY OF ECONOMIC GROWTH

Minimum Credits: 3
Maximum Credits: 3
Theoretical models of economic growth will be presented and empirical evidence of the sources of economic growth in both developed and developing countries will be reviewed. The effects of population growth and of dualism will be considered, and the role of investment in physical capital, r & d, and labor skills will be assessed. The potential for the rate of growth to be affected by the choice of the economic policy will be analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1110 (MINGRADE: 'C'); PROG: School of Arts & Sciences
Course Attributes: Capstone Course, Global Studies

ECON 1580 - ECON GROWTH PBLC HLTH DEMOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
Surveys the principle elements of demographic science, particularly within the context of developed and developing economies. Focuses on causes and consequences of changes in mortality, natality, migration and immigration as they apply to such current problems as (1) sufficient saving; (2) physical capital accumulation; (3) productivity changes; (4) the distribution of wealth and income, and (5) changes in population dependency ratios.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 or 1110 (MINGRADE: 'C')
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ECON 1610 - LATIN AMERICA ECON DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
A survey of institutional economic problems and development theories and policies in Latin America. Introductory section: significance of economic and non-economic factors. Core of the course: causes of underdevelopment, national planning, demographic growth, land tenure and agrarian reform, industrialization, financing, inflation, trade and balance of payments, foreign debt, regional integration, employment-unemployment, distribution, and social welfare. Final section: integrated model presenting alternative strategies to economic development in the area.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ECON 0100 and 0110) or ECON 0800; MIN GRADE: 'C' For All Listed Courses

ECON 1630 - ECONOMIC DEVELOPMENT OF CHINA

Minimum Credits: 3
Maximum Credits: 3
This course surveys the development of china's economy since 1800 with particular emphasis on studying china's experience under different forms of economic organization (market economy, central planning, reformed system combining plan and market) and comparing china's development with that of other nations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100; MIN GRADE: C

ECON 1680 - ECONOMICS OF THE EUROPEAN UNION

Minimum Credits: 3
Maximum Credits: 3
Introduction to economy of Europe, including theory and institutions of European community as they relate to economic systems, its economic relations with other European states and the world, its economic problems and policies. Elementary economics will be reviewed, but no specialist knowledge is required. European economic policies are examined in a critical manner. Some study of breakdown of eastern bloc and the implications

of eastern European crisis for European community and the United States.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ECON 0100 and 0110) or ECON 0800; MIN GRADE: 'C' FOR ALL COURSES LISTED
Course Attributes: DSAS Geographic Region General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ECON 1700 - CAPSTONE SEMINAR IN MICROECONOMICS

Minimum Credits: 3
Maximum Credits: 3
In this seminar, students will study in-depth a current topic in Economics. Their work will include a research paper or other culminating project which requires them to apply economic concepts and theories to analyze issues and situations in the real world.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (Min Grade 'C') and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Global Studies, Writing Intensive Course (WRIT)

ECON 1701 - GREEN INFRASTRUCTURE IMPLEMENTATION: A CASE STUDY OF THE PITTSBURGH REGION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to exercise the student's academic knowledge, passions, and skills to facilitate real-world problem solving in a collaborative setting. It will improve the students' skills in these areas: analytical; collaborative work; project management; communication; experimentation; and decision analysis. Differences in baseline skills and interests will be recognized in assignments and grading.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ECON 1710 - CAPSTONE SEMINAR IN INTERNATIONAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
In this seminar, students will study in-depth a current topic in International Economics. Their work will include a research paper or other culminating project which requires them to apply economic concepts and theories to analyze issues and situations in the real world.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 and ECON 1110 (Both Min Grade: 'C') and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Asian Studies, Capstone Course, DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Writing Requirement Course

ECON 1720 - CAPSTONE SEMINAR IN MACROECONOMICS

Minimum Credits: 3
Maximum Credits: 3
In this seminar, students will study in-depth a current topic in Economics. Their work will include a research paper or other culminating project which requires them to apply economic concepts and theories to analyze issues and situations in the real world.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1110 (Min Grade: 'C') and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Intensive Course (WRIT)

ECON 1730 - SEMINAR EXPERIMENTAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
There is a small, but rapidly growing literature in which behavioral experiments are used to test central propositions of various economic theories. This course will review the experimental literature that exists in several areas of economics, including industrial organization, social choice and preference revelation, behavior of decentralized markets, and bargaining.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1100 (Min Grade 'C') and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

ECON 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 12
Student designed project of study in a particular area of economics. Supervised closely by a faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

ECON 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 12
Faculty supervised project of student design.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

ECON 1903 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 12
Faculty supervised research project of student design or faculty suggestion.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

ECON 1905 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Current topics of particular interest to economics majors are discussed and analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Writing Intensive Course (WRIT)

ECON 1906 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

ECON 1907 - UNDERGRADUATE TEACHING ASSISTANT

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

Education

EDUC 1011 - CULTURALLY RESPONSIVE PEDAGOGY

Minimum Credits: 3
Maximum Credits: 3
Instructional practices that respond to the social context in which they (will) work. The course covers general principles and approaches to culturally responsive teaching such as how teachers develop meaningful relationships with students, how teachers learn from and about a school and local community, how teachers develop and implement culturally responsive classroom management, and how teachers develop expectations for students that maximize their capacity. In addition, the course will assist students in learning about and developing culturally responsive curriculum and pedagogy in their different content/subject matter areas (such as mathematics, science, art, language arts, and social studies). A recurrent and central question of the course is: how do teachers develop culturally responsive instructional practices in their particular disciplinary domain to maximize students learning opportunities?
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

EDUC 1110 - GENDER AND EDUCATION

Minimum Credits: 3
Maximum Credits: 3
This seminar examines the role that gender plays in the lives of students, researchers, educators, and policy makers. Major topics may include: changing trends of participation and success in k-16 schooling; childhood and professional socialization; media and curricular bias; coming of age; embodiment, sexuality, and sexual harassment; gender and the educational professions; feminist and ant-bias teaching; leadership and transnational communities of practice; activism and engaged feminist scholarship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EDUC 1998 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
Student pursues study of various topics under the direction of a faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

Electrical and Computer Engineering

ECE 0031 - LINEAR CIRCUITS AND SYSTEMS 1

Minimum Credits: 4
Maximum Credits: 4
The analysis of linear circuits. Electric variables and circuit elements; Kirchhoff's and Ohm's Law; Mesh and Node Equations; Thevenin and Norton equivalent circuits; first and second-order circuits; time domain analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0150 or 0230 or 00231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PROG: Swanson School of Engineering

ECE 0035 - LINEAR CIRCUITS AND SYSTEMS LAB FOR TRANSFERS STUDENTS

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SU3 Elective Basis

ECE 0041 - LINEAR CIRCUITS AND SYSTEMS 2

Minimum Credits: 3
Maximum Credits: 3
Sinusoidal steady-state analysis, network functions, real and reactive power, three-phase circuits, laplace transform method, two-port networks, and Fourier series.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0031 or COE 0031; PLAN: Electrical Engineering or Computer Engineering

ECE 0101 - LINEAR CIRCUITS AND SYSTEMS

Minimum Credits: 4
Maximum Credits: 4
This course covers the fundamentals of linear electric circuit analysis used throughout the electrical and computer engineering curricula. Students learn basic concepts and terminology of electrical engineering and develop knowledge and skills to analyze, evaluate, and design electrical circuits in class and in an accompanying laboratory where they build prototyping and analysis skills using modern test equipment. Primary topics include electric variables and circuit elements, Kirchhoff's and Ohm's Laws, mesh and node equations, Thevenin and Norton equivalent circuits, first- and second-order circuits, time- and frequency-domain analyses, ideal transformers, and AC power. PREREQUISITES: PHYS 0175 and ENGR 0012 or ENGR 0016 COREQUISITE: ECE 0401
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: COREQ: ECE 0401

ECE 0102 - MICROELECTRONIC CIRCUITS

Minimum Credits: 4
Maximum Credits: 4
This course covers the fundamentals of microelectronic circuits,specifically operational amplifiers, diode and rectifier circuits, analysis and design of MOS field-effect transistor and bipolar-junction transistor amplifiers, and CMOS digital-logic circuits. In this course, the students will integrate their knowledge of linear circuits and will learn how to analyze, evaluate, and design electronic circuits. This course includes a laboratory section in which the students will gain prototyping, design, and testing skills using conventional equipment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0101 or ECE 0031 or COE 0031; PLAN: Electrical Engineering or Computer Engineering

ECE 0111 - LINEAR CIRCUITS TRANSFER LAB

Minimum Credits: 1
Maximum Credits: 1
Linear Circuits Transfer Lab
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

ECE 0112 - MICROELECTRONIC CIRCUITS TRANSFER LAB

Minimum Credits: 1
Maximum Credits: 1
Laboratory section of Microelectronic Circuits for transfer students
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

ECE 0132 - DIGITAL LOGIC

Minimum Credits: 3
Maximum Credits: 3
Introduction to digital systems, Boolean algebra, minimization of logic functions, combinational and sequential circuit design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0150 or 0230 or 0231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PROG: Undergraduate Swanson School of Engineering

ECE 0142 - COMPUTER ORGANIZATION

Minimum Credits: 3
Maximum Credits: 3
Digital computer data representation, instruction formats, control, memory and input-output units, microprocessors, minicomputers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0132 or COE 0132; PROG: Swanson School of Engineering

ECE 0201 - DIGITAL CIRCUITS AND SYSTEMS

Minimum Credits: 4
Maximum Credits: 4
In this course, students study the fundamental building blocks used in the design of modern digital electronics and computers. Students learn how to use and combine digital components to create circuits that perform fundamental computing tasks such as arithmetic and storage of information. Primary topics covered include Boolean algebra and binary arithmetic, combinational and sequential logic circuits, Finite-State Machine (FSM), Hardware Design Language (HDL), and Register Transfer Level (RTL) for digital design. Students extend their knowledge to practice by way of hands-on laboratory exercises where various software and hardware tools are used to design and test solutions for real-world applications. After completing this course, students understand the design of digital computing systems at their most fundamental level and are able to craft such systems using modern tools and techniques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PHYS 0175

ECE 0202 - EMBEDDED PROCESSORS AND INTERFACING

Minimum Credits: 4
Maximum Credits: 4
This course covers the fundamentals of embedded processors and interfacing, including microprocessor structure and instruction sets, programming using C and assembly languages, memory and peripherals, interfacing, and embedded system design. Detailed studies of microprocessor I/O and interrupt techniques as applied to analog-to-digital, digital-to-analog, timers, and parallel and serial interfaces are also included. Laboratory activities provide the student with experience in developing and testing the hardware and software required to incorporate embedded computers into systems that solve real-world problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0201 and ECE 0301) or (COE or CS 0447) or COE 0147 and (COE 0501 or ECE 0301); PLAN: Electrical Engineering or Computer Engineering

ECE 0211 - DIGITAL CIRCUITS AND SYSTEMS CREDIT LAB

Minimum Credits: 1
Maximum Credits: 1
Digital Circuits and Systems Credit lab for transfer students. Associated with ECE 0201.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

ECE 0212 - EMBEDDED PROCESSORS AND INTERFACING CREDIT LAB

Minimum Credits: 1
Maximum Credits: 1
Embedded Processors and Interfacing Credit Lab for transfer students. Associated with ECE 0202.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

ECE 0257 - ANALYSIS AND DESIGN OF ELECTRONIC CIRCUITS

Minimum Credits: 3
Maximum Credits: 3
Diode circuits, power supply design; analysis and design of bipolar junction transistor and field effect transistor amplifiers. Bias stability analysis, power amplifiers. Ideal operational amplifiers. Cmos inverters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0031 or COE 0031; PROG: Swanson School of Engineering

ECE 0301 - ECE PROBLEM SOLVING WITH C++

Minimum Credits: 3
Maximum Credits: 3
This course covers fundamental concepts and techniques in software design for solving problems in electrical and computer engineering (ECE) using C++. Students learn procedural and object-oriented program development, as well as basic control structures, data structures, and algorithms. Students apply these skills in crafting and testing structured programs to solve problems of interest in ECE, such as linear circuits and systems, digital circuits and systems, and linear algebra and differential equations, through assignments that are tied to concepts covered in these other core sophomore courses of ECE.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0012 or 0016 or department consent

ECE 0302 - DATA STRUCTURES AND ALGORITHMS

Minimum Credits: 3
Maximum Credits: 3
This course covers the fundamentals of data structures and algorithms. Topics include stacks, queues, trees, lists, heaps, and other widely used abstract data types. Students will learn how to implement these data structures using C++ and techniques for analyzing algorithms that contain them. Advanced applications of recursion, sorting, and searching algorithms and other algorithms that incorporate data structures will also be discussed. This course will also introduce topics in parallel computing, and students will learn how to solve problems using modern application programmer interfaces (API) for parallel programming.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0301, or (COE 0401 or CS 0401), or with special permission; PROG: Swanson School of Engineering; PLAN: Electrical Engineering or Computer Engineering

ECE 0401 - ECE ANALYTICAL METHODS

Minimum Credits: 3
Maximum Credits: 3
This course provides the fundamental mathematical background to solve problems in electrical and computer engineering (ECE). The main objective is to cover topics from calculus, linear algebra, differential equations, and complex analysis most relevant to electrical and computer engineering. Primary topics include matrices, vectors, systems of equations, determinants, double integrals, first- and second-order ordinary differential equations, complex numbers, Eulers identity, phasor analysis, signal waveforms, Laplace transform, transfer functions, frequency response, and an introduction to the Fourier transform. Students also learn to solve mathematical problems based upon these topics, both analytically and using the MATLAB programming environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0230 and ENGR 0012 or ENGR 0016 or 0711

ECE 0402 - SIGNALS, SYSTEMS, & PROBABILITY

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course covering the mathematical modeling and analysis of signals and input-output systems, probability and statistics, with an emphasis on ECE applications of these concepts. The signal-processing portion builds on existing knowledge of ordinary differential equations and Laplace transforms, to a complete treatment of continuous-time signals and systems, especially linear time-invariant systems, in the time and frequency domains. The latter portion of the course covers basic concepts in probability, including discrete and continuous random variables, probability density and mass functions, computation of expected values, conditional probability densities, as well as an introduction to hypothesis testing and statistical analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0401; Plan: Electrical Engineering or Computer Engineering

ECE 0501 - DIGITAL SYSTEMS LABORATORY

Minimum Credits: 3
Maximum Credits: 3
This course and laboratory introduces students to the basic concepts of digital circuits, simulation and instrumentation, systems composed of discrete devices, logic gates, combinatorial and sequential circuits are designed, simulated, built and tested.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0031 or COE 0031) and (ECE 0132 or COE 0132); PROG: Swanson School of Engineering

ECE 1110 - COMPUTER ORGANIZATION AND ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
This course provides a detailed introduction into the basics of computer design common to most computer architectures including topics of digital computer data representation, arithmetic and logic units, instruction formats, control, microprocessor architecture, and memory systems. This course includes a heavy focus on assembly language and its interaction with a RISC computer architecture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0202; PLAN: Electrical Engineering or Computer Engineering

ECE 1120 - HARDWARE DESIGN METHODOLOGIES 1

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (COE 0501 or ECE 0501) and (COE 0147 or COE 0447 or CS 0447 or ECE 0142); PLAN: Computer Engineering or Electrical Engineering

ECE 1140 - SYSTEMS AND PROJECT ENGINEERING

Minimum Credits: 4
Maximum Credits: 4
This course covers system and software engineering processes, tools, and common practices through lectures and labs. Both the waterfall model and agile methods, specifically Extreme Programming and Scrum, are presented and used in developing a term-long group project. Students experience firsthand each of the concepts covered throughout the term by specifying, designing, and building an integrated working hardware/software system with equal contribution from each of the 5 or 6 team members. During the group project, full lifecycle documentation is created, UML is used for designing the system and a fully working system is developed, tested, and publicly presented. During the course students will use an IDE, UML, code repository, defect tracking, testing, scheduling, and documentation tools.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Course Requirements: PREREQS: (COE 0401 or CS 0401) OR (ECE 0202 and ECE 0302) PLAN: Electrical Engineering or Computer Engineering

ECE 1150 - COMPUTER NETWORKS

Minimum Credits: 3
Maximum Credits: 3
The course covers a theoretical understanding of technology involving, as well as problem solving skills for, interconnected devices where potential methods of interconnection are fundamental to the system design. Fundamentals related to wireless network systems and networks of computers or embedded digital devices, especially the lower levels of the stack, are emphasized. Coverage includes data link protocols, medium access control, addressing, routing, and transport protocols.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0142 or (COE 0147 or COE 0447 or CS 0447); or (ECE 0302 and ECE 0402); PLAN: Electrical Engineering or Computer Engineering

ECE 1155 - INFORMATION SECURITY

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to information security at the computer system level, the network level, and the human level. Students will first learn general computer security technology and principles such as cryptographic tools, user authentication, access control, malicious software and attacks, and defending techniques. Then, we will delve into the details of software and system security, including buffer overflow vulnerability, operating system security, and Cloud and Internet-of-Things (IoT) security. The latter units of the course cover cryptographic and message authentication algorithms and their application in security network protocols, as well as human factors and legal and ethical issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0202 and ECE0302; PLAN: Electrical Engineering or Computer Engineering

ECE 1160 - INTRODUCTION TO EMBDDED SYSTEM DESIGN

Minimum Credits: 3
Maximum Credits: 3
Introduction to the concepts and techniques of embedded system design including requirements, specifications, design implementation and testing. The laboratory is centered around the Altera Excalibur system and the NIOS core processor. Senior design course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0142 or (COE 0147 or 0447) or CS 0447 or ECE 0202 ; PLAN: Electrical Engineering or Computer Engineering

ECE 1161 - EMBEDDED COMPUTER SYSTEM DESIGN 2

Minimum Credits: 3
Maximum Credits: 3
Organized as a full term project carried out by student design groups. A complex embedded system will be designed, implemented and tested using Altera and other cad tools. Grade will be based on project reviews and the final project report. Proper design process will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1160 or 2160 or COE 1160; PROG: Swanson School of Engineering; PLAN: Electrical Engineering or Computer Engineering

ECE 1165 - DEPENDABLE COMPUTER ARCHITURE

Minimum Credits: 3
Maximum Credits: 3
The field of dependable computing has recently emerged as one of the most important areas of study in computer and electrical engineering. Modern computer systems are susceptible to a broad range of potential faults, errors, and failures, and increasing chip density and design complexity exacerbate the problem. Novel methods in hardware, information, network, software, and time redundancy are now available to mitigate these threats

in the form of resilient computer architectures, apps, and systems. The focus of studies here is the design and analysis of dependable machines, from small embedded systems to space-based platforms to high-end supercomputers, in terms of reliability, availability, performability, testability, and safety metrics, and more.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0290 and ECE 0142 or (COE 0147 or 0447) and ENGR 0020; LEVEL: Senior; PROG: Swanson School of Engineering; PLAN: COE or ECE/EE

ECE 1166 - PARALLEL COMPUTER ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
Introduction to fundamental and newly developing hardware and software topics in parallel computer architecture (pca) including concepts, models, methods, metrics, systems, and applications. Pca has become one of the most challenging and important areas of ece, and it is now a dominant theme throughout computer architecture, systems, and programming, from low-power embedded systems to high-end supercomputers, and featuring various forms of fixed-logic (e.g., cpu, dsp, gpu), reconfigurable-logic (e.g., fpga), and hybrid (e.g., cpu+dsp, cpu+fpga, cpu+gpu, cpu+fpga+gpu) processing devices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0142 or (COE 0147 or COE 0447) and (COE 0401 or CS 0401 or strong programming skills and experience in C or C++); and LVL: Senior; PLAN: Computer Engineering or Electrical Engineering

ECE 1170 - SPECIAL TOPICS: COMPUTER

Minimum Credits: 3
Maximum Credits: 3
An undergraduate course dealing with special topics of current interest in computers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE/COE 0501; PLAN: Electrical and Computer Engineering

ECE 1175 - EMBEDDED SYSTEMS DESIGN

Minimum Credits: 4
Maximum Credits: 4
This course introduces the fundamental challenges, methodologies, and techniques for designing different components of embedded computing systems, including microprocessors, I/O, memory and caches, and external sensors and actuators. Various system design issues including power management, real-time operating system design and system scheduling will also be discussed. Laboratory activities provide the students with the opportunities of gaining hands-on project experiences with modern embedded and mobile computing platforms such as microcontrollers, smartphones, sensors and wearables, as well as practicing these programming platforms over real-world embedded computing applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ((ECE 0142) or (COE 0142 or 0147 or 0447) or (CS 0447)), or ECE 0202; PROG: Undergraduate Swanson School of Engineering; Plan: Computer or Electrical Engineering

ECE 1180 - COMPUTATIONAL MODELING AND SIMULATION FOR ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
In this course students will develop several software programs to model and simulate a range of different physical systems. The course will focus on building software simulations of systems in terms of underlying model objects, world representations, interactions between objects, and a variety of models for time. Some experience in c/c++ programming is assumed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: COE 0445 or CS 0445; PROG: School of Engineering

ECE 1186 - SOFTWARE ENGINEERING

Minimum Credits: 4
Maximum Credits: 4
This course and laboratory introduces classical and object oriented software engineering. Software requirements, specification, object-oriented analysis, design, implementation, integration, and maintenance are covered. Each of these phases is examined on a practical level through a semester long, formal design project that involves the creation of a java-based internet application. Additional java-related topics are taught, including java applets, custom networking, remote database access, SQL, and multimedia extensions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0142) or (COE 0142 or 0147 or 0447) or (CS 0447) and (COE 0401 or CS 0401); PROG: Undergraduate Swanson School of Engineering

ECE 1188 - CYBER-PHYSICAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
The arrival of the internet-of-things (IOT) has brought about a world where the everyday objects we interact with, ranging from health monitoring devices to appliances and automobiles, are embedded with intelligence, the ability to communicate over a network and act on information stored in the "cloud". In this intensive laboratory course, students, by way of a series of projects, follow the journey data takes from a sensor, to a microcontroller, through a network and then to the cloud (and back!). Along the way students are exposed to a broad range of electrical and computer engineering topics including electronic design, embedded programming, digital signal processing, networking and information theory, wireless communications, antenna theory and big data analytics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (COE 0501 or ECE 0501) and (COE 0147 or COE 0447 or ECE 0142) and (COE 0401 or CS 0401); PLAN: Electrical Engineering

ECE 1192 - INTRODUCTION TO VLSI DESIGN

Minimum Credits: 4
Maximum Credits: 4
Introduction to the concepts and techniques of modern integrated circuit design. Use of computer aided design (cad) tools for circuit design and simulation. Senior design course, includes a laboratory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0142) or (COE 0142 or 0147 or 0447) or (CS 0447); PROG: Undergraduate Swanson School of Engineering

ECE 1193 - ADVANCED VLSI DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course is organized as a full semester project in conjunction with a small amount of lecture material on advanced CMOS digital design techniques, as well as the group design process itself. Students form groups of 3 to 5 per group that design and implement different VLSI projects which are then fabricated by MOSIS and returned for testing. Focus is on teamwork with frequent oral/written reports.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1192 or ECE 2192; PROG: Swanson School of Engineering

ECE 1195 - ADVANCED DIGITAL DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course is designed to teach both the theoretical and practical considerations in the design of computing systems. It introduces the students to modern computer aided design (CAD) tools, languages, and techniques. The student is exposed to a variety of design experiences that complement their knowledge of digital circuits and microprocessors. Students will complete a series of laboratory assignments and learn how to implement large-scale, complex digital systems with commercial CAD tools. Designs will be prototyped using Field Programmable Gate Arrays (FPGA) and verified using electronic test equipment.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0202; PLAN: Electrical Engineering or Computer Engineering

ECE 1201 - ELECTNC MEASURMNTS & CRCTS LAB

Minimum Credits: 3
Maximum Credits: 3
Electronic measurements and circuits including experiments on use of electronic test equipment, a variety of linear circuits; non-linear device characteristics, operational amplifier basics, and transistor amplifier characteristics and design. Time and frequency domain methodologies are covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: ECE 0257; PROG: Undergraduate Swanson School of Engineering

ECE 1212 - ELECTRONIC CIRCUIT DESIGN LAB

Minimum Credits: 3
Maximum Credits: 3
An electronic circuits laboratory experience with emphasis on circuit applications and design. Topics include: multi stage amplifier design; operational amplifier applications; analog-digital conversion applications, active filters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1201 or ECE 0102 and ECE 0402 Plan: Electrical Engineering or Computer Engineering

ECE 1215 - ELECTROACOUSTICS AND AUDIOELECTRONICS

Minimum Credits: 3
Maximum Credits: 3
Topics covered include: Electroacoustics (SPL, microphones, loudspeakers) Design of audio-specific small-signal circuitry (OP amp design, JFETs, vacuum tubes, noise) Power amplifier topologies (class A, AB, D) Audio effects circuitry (distortion, delay, tremolo, wah). This is a lab-based course in which students will complete a lab assignment on a different topic every week, concluding with the design, construction, and characterization of a custom audio circuit using the DIYRE Colour module system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1212 and ECE 0402 or ECE 1552

ECE 1232 - INTRO LASERS & OPTCL ELECTNC

Minimum Credits: 3
Maximum Credits: 3
Introduction to and applications of basic laser and optical electronic principles; optical modulation and detection systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0031 or COE 0031) and (ECE 1259 or PHYS 1351); PROG: Swanson School of Engineering

ECE 1238 - DIGITAL ELECTRONICS

Minimum Credits: 3
Maximum Credits: 3
Switching behavior of semiconductor devices; logic circuit families; DTL, TTL, Schottky, Ecl, CMOS, i2l; regenerative logic circuits; semiconductor memories; spice circuit simulation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0132 or COE 0132) and ECE 0257; PROG: Swanson School of Engineering

ECE 1247 - SEMICONDUCTOR DEVICE THEORY

Minimum Credits: 3
Maximum Credits: 3
Electrical properties of solids, energy levels, semiconductor theory, diodes, bipolar junction transistors, field effect transistors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0031 and MATH 0290) or (ECE 0102 and ECE 0401) and CHEM 0960. Plan: Electrical Engineering

ECE 1250 - NANOTECHNOLOGY & NANO-ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
The course introduces nanoscale devices created from a range of nanomaterials including carbon nanotubes (CNTS), nanoparticles (NPS), and nanowires (NWS). Theories of operation, fabrication techniques and applications of Nano devices will be discussed. The course combines lecture, laboratory work, and web-supported project-based learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0230 or 0235 or 0150 or 0221) and [PHYS 0175 or 0476 or (0210 and 0203) or (0150 and 0151)]; PROG: Swanson School of Engineering

ECE 1251 - MICRO AND NANO DEVICE FABRICATION LABORATORY

Minimum Credits: 3
Maximum Credits: 3
Micro/Nano fabrication area in science and engineering has already produced remarkable results in understanding and controlling matter and is expected to make a tremendous impact on electronics and society by facilitating breakthroughs for tomorrow's electronic devices. Micro and Nano Device Laboratory will introduce students to device fabrication and design methodology for fundamental fabrication processes. In addition, this course will provide an understanding of the scientific and technical aspects of microtechnology/nanotechnology and will enable students to contribute to this rapidly developing new technology field. This course comprises laboratory work and accompanying lectures that cover cleanroom introduction, wafer cleaning, silicon oxidation, mask design, photolithography, thin film deposition, wet and dry etching, and other nanofabrication processes. This elective course is designed for junior and senior level undergraduate students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CHEM 0970 or CHEM 0420) and PHYS 0175 and (ENGR 0240 or ECE 1250) or instructor approval. PROGRAM: Swanson School of Engineering

ECE 1259 - ELECTROMAGNETICS

Minimum Credits: 3
Maximum Credits: 3
Vector calculus, gradient curl, divergence theorem and stokes' theorem, coulomb's law gauss's law, Laplace equation, poisson equation, dielectrics, BIOT-Savart Law, vector potentials, ampere's law, faraday's law, inductance, magnetic materials, Lorentz force, Maxwell's equation, electromagnetic radiation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0240 or ECE 0402; PLAN: Electrical Engineering or Computer Engineering

ECE 1266 - APPLICTIONS OF FIELDS & WAVES

Minimum Credits: 3
Maximum Credits: 3
Plane waves, the wave equation, poynting vector, transmission lines, wave guides, antennas and radiation applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 1259 or PHYS 1351) and (ECE 0031 or COE 0031); PROG: Swanson School of Engineering

ECE 1270 - SPECIAL TOPICS: FUNDAMENTALS ELECTRONICS PROTOTYPING

Minimum Credits: 1
Maximum Credits: 1
An undergraduate course dealing with special topics of current interest in electronic devices, lasers, and optical electronics.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: ECE 0501 or COE 0501 or ECE 1201 or ECE 0031 or COE 0031; PROG: Swanson School of Engineering; PLAN: Electrical Engineering Students Only

ECE 1286 - ANAL & DSGN ANLG INTGRTD CRCT

Minimum Credits: 3
Maximum Credits: 3
Introduction to spice. Multiple transistor circuits, internal structure of operational amplifiers. Current sources and current steering circuits, active loads. Frequency response of directly coupled, capacitive coupled and tuned amplifiers. Analysis and design of multistage amplifiers. Feedback and frequency compensation in operational amplifiers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0257; PROG: Swanson School of Engineering

ECE 1390 - INTRO TO IMAGE PROCESSING

Minimum Credits: 3
Maximum Credits: 3
Introductory subjects in image processing include image spaces and image representation, image enhancement, edge detection, edge and region based segmentation, and feature extraction and object recognition. Spatial and frequency domain approaches will be addressed with emphasis on spatial domain approaches. Some problems are solved on the computer in the c programming language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0280 or ECE 0402; PROG: Undergraduate Swanson School of Engineering; PLAN: ECE or COE

ECE 1395 - INTRODUCTION TO MACHINE LEARNING

Minimum Credits: 3
Maximum Credits: 3
Machine Learning methods are at the core of many recent advances in "intelligent computing". Current applications include machine perception (vision, speech recognition), control (process control, robotics), data mining, time-series prediction (e.g. in finance), natural language processing, text mining and text classification, bio-informatics, neural modeling, computational models of biological processes, and many other areas. This is an introductory undergraduate course on machine learning and its applications in different areas. The course will briefly cover techniques for visualizing and analyzing multi-dimensional data along with algorithms for projection, dimensionality reduction, regression, clustering, classification and neural networks, and deep learning. A main course objective is to present various approaches to classifier design so that students can make judicious choices when confronted with real pattern recognition problems. However, it is important to emphasize that the design of a complete pattern recognition system for a specific application domain requires domain knowledge, which is beyond the scope of this course. Students will use available tools and libraries to implement some algorithms using MATLAB.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0280 or ECE 0402), ENGR 0020, and (CS 0401, COE 0401, ECE 1170, or ECE 0301); PLAN: Electrical Engineering or Computer Engineering

ECE 1472 - ANALOG COMMUNICATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Analysis of modern analog communication systems, including the theory underlying their design and practical implementation issues. Various forms of amplitude and angle modulation. Amplifiers, mixers, detectors, phase-lock loops, and the design of transmitters and receivers. Probability, random signals, optimal receivers, noise and performance analysis. Case studies including telephone, commercial radio, and television.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1552; PROG: Swanson School of Engineering

ECE 1473 - DIGITAL COMMUNICATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Analysis of modern digital communications systems, including the theory underlying their design and practical implementation issues. Baseband digital signaling: pam, PCM, quantization, ISI, multiplexing. Modulation formats: ask, FSK, BPSK, DPSK, GAM. Probability, information channel capacity random signals, optimal receivers and performance analysis. Case studies include modems, satellite systems, and cellular telephone.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1552; PROG: Swanson School of Engineering

ECE 1552 - SIGNALS AND SYSTEMS ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Signal representation, continuous time systems, Fourier series, Fourier transform, laplace transform, discrete time systems, Fourier analysis of discrete time systems, z transform, the discrete Fourier transform.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0290 and ECE 0031; PROG: Undergraduate Swanson School of Engineering

ECE 1560 - DIGITAL SIGNAL PROCESSING

Minimum Credits: 3
Maximum Credits: 3
This course provides students with theoretical background and practical experience in data acquisition and digital signal processing related to computer-based measurements. The course addresses the representation, analysis, and design of discrete time signals and systems. Topics covered include implementation of discrete systems, discrete-time Fourier analysis and the FFT algorithm, analysis of discrete systems in terms of poles and zeros, and design of infinite and finite impulse response filters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0402 or ECE 1552 Plan: Electrical Engineering or Computer Engineering

ECE 1562 - DIGITAL AND ANALOG FILTERS

Minimum Credits: 3
Maximum Credits: 3
Active filter design; operational amplifier circuits; cascade design with first-order and biquad circuits; Butterworth and Chebyshev low pass filters; sensitivity and frequency transformations. Digital filter design; IIR filter design using bilinear transformation; window design of fir filters; realization of IRR and fir filters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1552; PROG: Swanson School of Engineering

ECE 1563 - SIGNAL PROCESSING LABORATORY

Minimum Credits: 3
Maximum Credits: 3
Data acquisition and computer based measurements. Recursive and fir filters. Frequency response and filter implementations using FFT's.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1201 and 1552; PROG: Undergraduate Swanson School of Engineering

ECE 1570 - SPECIAL TOPICS

Minimum Credits: 1
Maximum Credits: 3
An undergraduate course dealing with special topics of current interest in control, signal, and image processing, speech processing, and telecommunications.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1552; PROGRAM: Swanson School of Engineering

ECE 1673 - LINEAR CONTROL SYSTEMS

Minimum Credits: 4
Maximum Credits: 4
Introduction to feedback control systems, mathematical models, second order systems response and identification, system types, steady-state errors, root locus analysis and design, bode plots, nyquist theory and frequency domain compensation techniques. Includes a laboratory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1552 or ECE 0402 Plan: Electrical Engineering or Computer Engineering

ECE 1674 - MECHATRONIC SYSTEMS

Minimum Credits: 4
Maximum Credits: 4
This course covers Mechatronic system design providing an understanding of each of the basic engineering disciplines and their interactions involved: controls (control laws, analytic tools and error budgets), mechanical systems (motors, bearings, ballscrews, gears etc.), electrical systems (controllers, power amplifiers, sensors, cable management), and software engineering (embedded computing & PLCs). This course will emphasize designing mechatronic systems from a control system perspective.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ECE 0202 and ECE 0402), or ECE 1552 PROG: Swanson School of Engineering; PLAN: Computer or Electrical Engineering

ECE 1701 - FUNDAMENTALS OF ELECTRIC POWER ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This is a first course in electric power engineering for electrical and computer engineers. The course provides the fundamental background to solve some common problems in electric power engineering, and to design power systems using engineering assumptions based on this background. The main objective is to cover topics in AC single phase and three phase power, transformers, transmission lines and electric machinery by integrating their knowledge of linear circuit analysis, electricity, and magnetism to these power systems topics. Students will also gain knowledge of power systems simulation using the PowerWorld simulator. This course will provide the prerequisite knowledge for the study of load flow, symmetrical components, and fault analysis which will be covered in a later course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0102 and ECE 0402 Plan: Electrical Engineering or Computer Engineering

ECE 1710 - POWER DISTRIBUTION SYSTEMS ENGINEERING AND SMART GRIDS

Minimum Credits: 3
Maximum Credits: 3
Review of power engineering fundamentals, load characteristics and distribution transformers, design of distribution substations, design considerations of primary and secondary systems, substation grounding, voltage drop and power loss, application of capacitors to distribution systems, distribution system voltage regulation and system software, smart grid technologies, energy management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0031 or ECE 0101 or MEMS 0031 or ENGR 1869; PROG: Swanson School of Engineering

ECE 1750 - POWER ELECTRONICS CONVERSION THEORY

Minimum Credits: 3
Maximum Credits: 3
Analysis of power electronic circuits. Converter concepts, models and metrics. Rectifiers. DC-DC converters. Inverters. Thermal and reliable design. Control and applications, e.g. photovoltaic and motor drives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0257 or COE 0257 and ECE 1552

ECE 1769 - POWER SYSTEM ANALYSIS 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to modern power systems and methods of analysis. Transmission lines, network representations, network solutions, balanced and unbalanced faults, real and reactive load flow study techniques, and basic concepts in stability and economic dispatch.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0031 or COE 0031; PROG: Swanson School of Engineering

ECE 1770 - SPECIAL TOPICS: ELECTRONIC MICROPROCESSOR SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
An undergraduate course dealing with special topics of current interest in power.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0132 or COE 0132; PROG: Swanson School of Engineering

ECE 1771 - ELECTRIC MACHINERY

Minimum Credits: 3
Maximum Credits: 3
Application of magnetostatics to the design of magnetic circuits, actuators, sensors and rotating electric machines. Performance characteristics of transformers, induction machines, synchronous machines and DC machines. Includes a laboratory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0031 or COE 0031 and ECE 1259; PROG: Swanson School of Engineering

ECE 1773 - POWER GENERATION, OPERATION, AND CONTROL

Minimum Credits: 3
Maximum Credits: 3
Area control error (ace), automatic generation control (AGC), characteristics of power generation units, economic dispatch of generators, unit commitment, hydrothermal coordination and storage, interchange power, limited energy supply, optimal power flow, power system security, production cost modeling, state estimation, transmission system effects, unit commitment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1673 or 1769; PROG: Swanson School of Engineering

ECE 1774 - POWER SYSTEMS ANALYSIS 2

Minimum Credits: 3
Maximum Credits: 3
Steady state phenomena, matrix transformations, system parameters, system unbalances, digital methods, and numerical analysis techniques applied to load flow, state estimators, and fault studies in the large power systems.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: ECE 1769

ECE 1775 - POWER QUALITY

Minimum Credits: 4
Maximum Credits: 4
An introductory power systems laboratory course providing hands-on experience covering various electric power topics. The course will be conducted in the Electric Power Systems Laboratory and will include lectures, analytical and simulation assignments, and laboratory procedures. Topics include: familiarization with lab equipment and safety, power system equipment, power conversion equipment, and electric machinery.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0257

ECE 1776 - MICROGRID CONCEPTS & DISTRIBUTED GENERATION TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3
This course describes fundamental concepts related with the development of microgrids and the integration of distributed generation. Technical topics are divided into three modules. The first module introduces microgrid components and discusses the main types of microsources. The second focuses on energy storage technologies. The third includes system integration topics, such as power electronics interfaces; dc and ac architectures,; economics, operation, stabilization, and control; reliability aspects; grid interconnection, and microgrids as part of the "smart" grids. This course also aims at preparing students to conduct research or helping them improve their research skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ECE 1885 - DEPARTMENTAL SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Seminars are designed to acquaint the student with aspects of engineering that are not normally encountered in classes and school activities and include a wide range of topics such as the significance of engineering as a profession, and ethical problems in engineering and skills required for a successful engineering career.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

ECE 1890 - ECE PROTOTYPING FUNDAMENTALS

Minimum Credits: 1
Maximum Credits: 1
In this course students will learn fundamental prototyping techniques used in the design of electronic systems. This includes Printed-Circuit Board (PCB) Design, soldering, manufacturing and various other hands-on skills. The learning objective of this course is to prepare students with practical skills that are often needed in design-oriented electrical and computer engineering courses and projects.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: H/S/U Basis

ECE 1893 - ECE UNDERGRADUATE RESEARCH PROJECT

Minimum Credits: 1
Maximum Credits: 3
Undergraduate research experience involves students in an original research project. Using one or a variety of methods, students will collect original data and contribute to problem solving in ECE. As a first research experience, emphasis will be placed on the process of scientific research, including formulation of a research plan, data collection, assessment of data quality, and interpretation based on available data. Students are required to present their results to an audience outside of the department.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

ECE 1894 - ECE UNDERGRADUATE INDUSTRY PROJECT

Minimum Credits: 1
Maximum Credits: 3
In this course, students work in a team to solve real world engineering problems via an industry sponsored design project. Students will be provided design requirements and be charged with the development and testing of a functional prototype. In addition to technical skills, students will also learn various professional skills, such as the importance of professionalism and good communication, by way of regular interaction and meetings with industry mentors.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

ECE 1895 - JUNIOR DESIGN FUNDAMENTALS

Minimum Credits: 3
Maximum Credits: 3
This course teaches students the engineering design process. Emphasis is placed on the development of fundamental hands-on-skills commonly used in the design of modern electrical and computer engineering technologies. Students participate in a series of mock design experiences, culminating in the participation of an actual design project. After completion of this course, students will be able to design a system that meets specifications and satisfies a stakeholder's needs and requirements. Students will also learn how to create functional design prototypes and verify them.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQS: ECE 0102, and ECE 0202, and ECE 0302, and ECE 0402; PLAN: Electrical Engineering or Computer Engineering

ECE 1896 - SENIOR DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
This is a rigorous, capstone design course where students apply the analytical and synthesis skills they have developed during undergraduate coursework to the design of a working prototype. Students work in teams to identify and analyze a real problem, design a hardware/software solution, and construct, test and then evaluate the effectiveness of the prototype. The primary goal of this course is to provide students with a culminating, major design experience that incorporates engineering standards and realistic constraints, preparing them for professional engineering practice.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: ECE 0031 or COE 0031 and (ECE 0257 or COE 0401 or CS 0401); PROG: Undergraduate Swanson School of Engineering
Course Attributes: Capstone Course

ECE 1898 - ENGINEERING PROJECT

Minimum Credits: 1
Maximum Credits: 6
An investigation of an approved engineering subject under the supervision of a faculty monitor. Must be approved in advance by the faculty monitor and the department chair.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

ECE 2295 - SPECIAL TOPICS: ELECTRONICS

Minimum Credits: 3
Maximum Credits: 3
An MS level course in special topics of current interest in electronics.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Engineering students only.

ECE 2521 - ANALYSIS STOCHASTIC PROCESSES

Minimum Credits: 3
Maximum Credits: 3
Probability theory, random variables, sums and limits of random variable sequences, time and frequency domain, modeling of continuous and discrete random signals, lease square estimation.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter GRD
Course Requirements: School of Engineering students only.

ECE 2523 - DIGITAL SIGNAL PROCESSING

Minimum Credits: 3
Maximum Credits: 3
Discrete time-signal processing, discrete fourier transform and fft implementation, design and stability considerations of fir and iir filters, filter implementation and finite register effects.
Academic Career: GRAD
Course Component: Lecture
Grade Component: GradLG/SU3
Course Requirements: School of Engineering students only.

Emergency Medicine

EM 1102 - EMERGENCY MEDICINE TECHNICIAN

Minimum Credits: 4
Maximum Credits: 4
This course providesÂ learners with the cognitive knowledge and values to develop as an emergency medical professional at the basic life-support level. This course meets allÂ minimum training requirements as established by the U.S. Department of Transportation in the EMT, National Education Standards. This course provides the learner with the opportunity to develop basic life-support psychomotor skills. Successful completion of this course makes the learner eligible to become certified by the National Registry of EMT's and the Pennsylvania Department of Health.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Sch Hlth & Rehabilitation Scs

EM 1104 - EMT CLINICAL

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: CREQ: EM 1102; PROG: Sch Hlth & Rehabilitation Scs

EM 1111 - FOUNDATIONS OF EMERGENCY CARE

Minimum Credits: 3
Maximum Credits: 3
This course focuses on pre-hospital assessment and therapeutic intervention of adult and pediatric patients with acute traumatic injury and includes advanced airway assessment and procedural intervention for patients with acute respiratory pathophysiology. Students will explore emergency medical services systems and appreciate their role and responsibility as pre-hospital practitioners. Learning strategies include scenario-based case presentations with a focus on critical thinking and decision making. This course is paired with a required lab component.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1112 - PATHOPHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Introductory course in pathophysiology for entry-level health care providers. This course focuses on human responses to illness expressed at the physiologic, pathophysiologic, experiential, and behavioral levels. Human responses are examined in terms of assessments appropriate to selected problems, rationale for medical interventions, and therapeutic effectiveness. Topics include: general principles of pathophysiology
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1113 - PHARMACOLOGY

Minimum Credits: 3
Maximum Credits: 3
Introduces students to the categories of pharmacological agents and the application of pharmacological concepts to clinical practice. Emphasis will be placed on understanding physiologic medication action. A separate medication lab is offered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1114 - MEDICATION ADMINISTRATION

Minimum Credits: 1
Maximum Credits: 1
Practical skills lab designed to allow students to develop the psychomotor skills of medication administration. Skills include: phlebotomy, intramuscular and subcutaneous injections, IV cannulation, IV medication administration, inhalation, endotracheal and sublingual administration, and pharmacology math. This course also provides students with the practical skills needed for Advanced Cardiac Life Support (ACLS) care.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1115 - INTRODUCTION TO PHYSICAL ASSESSMENT

Minimum Credits: 3
Maximum Credits: 3
Designed to introduce students to the principles and techniques of physical examination. Students will be taught an organized systemic approach to assessment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1116 - PHYSICAL EXAM LAB

Minimum Credits: 1
Maximum Credits: 1
Practical skills lab designed to assist in the development of psychomotor skills of patient assessment, airway management, ventilation, and trauma care skills.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1117 - EMS OPERATIONS

Minimum Credits: 3
Maximum Credits: 3

Designed to expose the paramedic student to various field operations procedures. Topics include: medical incident command, rescue awareness and operations, hazardous materials awareness and operations, and crime scene awareness.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1122 - CARDIOLOGY AND RESPIRATORY

Minimum Credits: 3
Maximum Credits: 3
This course covers the specific pathophysiology, assessment, and management of the cardiac patient. Topics inlcude: 3-lead and 12-lead ECG interpretation, cardiac anatomy and physiology, patient assessment and management, ACLS, pharmacological, and other therapies. This class is offered with a required lab course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1123 - CARDIOLOGY LAB

Minimum Credits: 1
Maximum Credits: 1
This lab section, in conjunction with the Assessment-Based Management Lab, provides case-based learning for the students related to general adult emergencies. Students will participate in case-based sessions that allow them to work on a simulated patient that is suffering from a specific illness or injury and allows the students to develop strong patient, resource, and scene management skills that they can take with them into their field practice. This lab helps to promote strong clinical decision-making skills that will allow the students to function as a strong clinical provider in the field.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS or BPH or BS-H)

EM 1124 - ADULT MEDICAL EMERGENCIES

Minimum Credits: 3
Maximum Credits: 3
This course focuses on pre-hospital assessment and therapeutic intervention of acute and chronic adult pathophysiology. Students will explore the different processes of patient care for special populations across the life span. Learning strategies include scenario-based case presentations with a focus on critical thinking and decision making. This course is paired with a required lab component.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1125 - OB/GYN, NEWBORN, AND PEDIATRIC CARE

Minimum Credits: 3
Maximum Credits: 3
This course covers the specific pathophysiology, assessment, and management of common medical and trauma conditions in pediatric patients. Additional information regarding obstetrics, neonates, and gynecologic patients will be presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1126 - ASSESSMENT-BASED MANAGEMENT

Minimum Credits: 1
Maximum Credits: 1
This lab section, in conjunction with the Cardiology Lab, provides case-based learning for students related to general adult emergencies. Students will participate in case-based sessions that allow them to work on a simulated patient that is suffering from a specific illness or injury and allows the students to develop strong patient, resource, and scene management skills that they can take with them into their field practice. This lab helps to

promote strong clinical decision-making skills that will allow the students to function as a strong clinical provider in the field.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS or BPH or BS-H)

EM 1131 - CLINICAL 1

Minimum Credits: 4
Maximum Credits: 4
Designed to accompany the fall semester courses, these clinical rotations focus on the development and documentation of history taking and assessment skills. Additionally, psychomotor skill development in a clinical setting is emphasized.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1132 - CLINICAL 2

Minimum Credits: 4
Maximum Credits: 4
Designed to accompany the spring semester courses, these clinical rotations focus on the integration of psychomotor skills with assessment and history taking. In addition to scheduled rotations students will spend the last weeks completing a summative field evaluation. This evaluation consists of 80 field hours with the student functioning as a primary care provider.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1135 - CRITICAL CARE CLINICAL EXPERIENCE I

Minimum Credits: 1
Maximum Credits: 1
The sequential critical care courses offered within the EM Program provides a solid foundation for understanding the principles of critical care. Students with only out of hospital clinical practice have little foundation to understand the in hospital critical care environment. The addition of diagnostic testing and hemodynamic monitoring provides for a more tailored and timely response to the patient's clinical needs. Students can gain an appreciation for these interactions while in an observational role through case study and with the support of a critical care preceptor.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

EM 1152 - ISSUES IN HEALTH CARE

Minimum Credits: 2
Maximum Credits: 2
This course is designed to engage students in current aspects of health care impacting patients and health care practitioners. Topics are extremely diverse in assuring all possible domains of health care are addressed. Various methods of presentation are utilized in this course. Health care delivery at national and international models is explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1153 - ISSUES IN HEALTH CARE EDUCATION

Minimum Credits: 2
Maximum Credits: 2
Survey course designed to teach the principles of adult education, classroom management skills, selection of teaching aides, and development of lesson plans. Students will function as teaching assistants in EMS education programs.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1154 - HEALTH CARE RESEARCH

Minimum Credits: 2
Maximum Credits: 2
This course provides an overview of basic concepts of research, including statistics, measurement, and design. This course emphasizes the ability of the student to read and evaluate research papers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1155 - LEGAL ISSUES IN HEALTH CARE

Minimum Credits: 2
Maximum Credits: 2
This course is meant to provide students with a survey of some of the major legal issues facing emergency medical services providers and administrators, and those who aspire to those positions. This course will focus on the practical issues confronting EMS organizations. Major areas to be addressed include the law of negligence and medical malpractice; consent and refusal of emergency care; "do not resuscitate" issues; the legal aspects of documentation; confidentiality and HIPAA; EMTALA and ER diversions; fraud and abuse; personnel management; OSHA; legal issues for non-profit EMS organizations; and the basics of EMS reimbursement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1158 - FINANCE AND ACCOUNTING FOR HEALTH CARE

Minimum Credits: 2
Maximum Credits: 2
Finance and Accounting provides an introduction to the basic concepts of accounting and financial management in health care. The course is geared for professionals who do not anticipate serving primarily in a financial management role. The concepts will be studied in the context of their practical application.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BS-H, BPH)

EM 1160 - PROFESSIONAL ISSUES

Minimum Credits: 3
Maximum Credits: 3
This course will provide the student with the tools necessary to promote the long-term viability of an EMS service. This course has been designed to prepare the student to be a leader of traditional or entrepreneurial EMS opportunities. Guest speakers will be utilized for their expertise in the administration of EMS agencies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1166 - SENIOR INTERNSHIP

Minimum Credits: 1
Maximum Credits: 1
The senior internship is designed to allow students to gain valuable experience in an educational, clinical, or administrative aspect of health care. Students are asked to find internships in their specific area of health care interest. The internship can take place domestically or internationally.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1168 - LEADERSHIP IN HEALTH CARE

Minimum Credits: 3
Maximum Credits: 3
Through reading, review, and discussion of germane reference materials, this class will explore the components of leadership for industry, organizations, and individuals as applicable to U.S. health care in general, and more specifically, to emergency medical services as part of the health care system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1169 - CRITICAL CARE MANAGEMENT

Minimum Credits: 4
Maximum Credits: 4
This course focuses on advanced assessment and therapeutic intervention common in the critical care setting for both adult and pediatric patients. Emphasis is placed on continuum of critical care interventions during inter-facility transport. The course follows the ASTNA core curriculum outline, the PA DoH Pennsylvania Air Ambulance Transport Educational Program guidelines, and is approved for continuing education by the IBSC. Topics highlighted include intra-aortic balloon pump management, hemodynamic monitoring and pharmacology, and initiation and maintenance of the mechanically ventilated patient. Learning strategies include lectures with integrated, scenario-based case presentations and a focus on critical thinking and decision making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1170 - CRITICAL CARE MEDICINE 1

Minimum Credits: 3
Maximum Credits: 3
This course provides a foundational review and focuses on advanced assessment and therapeutic intervention common in the critical care setting for both adult and pediatric patients. Emphasis is placed on continuum of critical care interventions during interÂ-facility transport. The course follows elements of the ASTNA core curriculum outline and the PA DoH Pennsylvania Air Ambulance Transport Educational Program guidelines. Topics highlighted include body systems assessment, analysis of laboratory diagnostics, hemodynamic monitoring and pharmacology, and chemically facilitated management of the crash airway. Learning strategies include lectures with case presentations and a focus on critical thinking and decision making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

EM 1171 - CRITICAL CARE MEDICINE 2

Minimum Credits: 3
Maximum Credits: 3
This course provides a foundational review and focuses on advanced assessment and therapeutic intervention common in the critical care setting for both adult and pediatric patients. Emphasis is placed on continuum of critical care interventions during interÂ-facility transport. The course follows elements of the ASTNA core curriculum outline and the PA DoH Pennsylvania Air Ambulance Transport Educational Program guidelines. Topics highlighted include intra-aortic balloon pump management, advanced shock management, and initiation and maintenance of the mechanically ventilated patient. Learning strategies include lectures with case presentations and a focus on critical thinking and decision making. EM 1170 is a prerequisite course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS)

EM 1172 - ISSUES IN HEALTH CARE - WEB

Minimum Credits: 2
Maximum Credits: 2
This course is designed to engage students in current aspects of health care impacting patients and health care practitioners. Topics are extremely

diverse in assuring all possible domains of health care are addressed. Various methods of presentation are utilized in this course. Health care delivery at national and international models is explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1173 - ISSUES IN HEALTH CARE EDUCATION - WEB

Minimum Credits: 2
Maximum Credits: 2
Survey course designed to teach the principles of adult education, classroom management skills, selection of teaching aides, and development of lesson plans. Students will function as teaching assistants in EMS education programs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1174 - HEALTH CARE RESEARCH - WEB

Minimum Credits: 2
Maximum Credits: 2
This course provides an overview of basic concepts of research, including statistics, measurement, and design. This course emphasizes the ability of the student to read and evaluate research papers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1175 - LEGAL ISSUES IN HEALTH CARE - WEB

Minimum Credits: 2
Maximum Credits: 2
This course is meant to provide students with a survey of some of the major legal issues facing emergency medical services providers and administrators, and those who aspire to those positions. This course will focus on the practical issues confronting EMS organizations. Major areas to be addressed include the law of negligence and medical malpractice; consent and refusal of emergency care; "do not resuscitate" issues; the legal aspects of documentation; confidentiality and HIPAA; EMTALA and ER diversions; fraud and abuse; personnel management; OSHA; legal issues for non-profit EMS organizations; and the basics of EMS reimbursement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1176 - SENIOR INTERNSHIP - WEB

Minimum Credits: 1
Maximum Credits: 1
The Internship is designed to allow students to gain valuable experience in an educational, clinical, or administrative aspect of health care. Students are asked to find internships in their specific area of health care interest. The internship can take place domestically or internationally.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

EM 1177 - SENIOR SEMINAR

Minimum Credits: 1
Maximum Credits: 1
Senior Seminar requires students to create a scholarly paper and presentation. Students are permitted to utilize the information gained during their internship if they desire. Students can also develop new materials based upon an approved topic in any health care area of interest to them.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1178 - LEADERSHIP IN HEALTH CARE-WEB

Minimum Credits: 3
Maximum Credits: 3
Through reading, review, and discussion of germane reference materials, this class will explore the components of leadership for industry, organizations, and individuals as applicable to US health care in general, and more specifically, to Emergency Medical Services as part of the health care system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1179 - HEALTH CARE MANAGEMENT - WEB

Minimum Credits: 2
Maximum Credits: 2
The purpose of the course is to provide an introduction to the basic concepts of managing in organizations with a particular focus on health care organizations. The concepts will be studied in the context of their practical application.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1180 - HEALTH CARE MANAGEMENT

Minimum Credits: 2
Maximum Credits: 2
The purpose of the course is to provide an introduction to the basic concepts of managing in organizations with a particular focus on health care organizations. The concepts will be studied in the context of their practical application.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Emergency Medicine (BS, BPH, BS-H)

EM 1181 - PROFESSIONAL ISSUES - WEB

Minimum Credits: 3
Maximum Credits: 3
This course will provide the student with the tools necessary to promote the long-term viability of an EMS service. This course has been designed to prepare the student to be a leader of traditional or entrepreneurial EMS opportunities. Guest speakers will be utilized for their expertise in the administration of EMS agencies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1182 - CRITICAL CARE MANAGEMENT - WEB

Minimum Credits: 4
Maximum Credits: 4
This course provides a foundational review and focuses on advanced assessment and therapeutic intervention common in the critical care setting for both adult and pediatric patients. Emphasis is placed on continuum of critical care interventions during interÂ-facility transport. The course follows elements of the ASTNA core curriculum outline and the PA DoH Pennsylvania Air Ambulance Transport Educational Program guidelines. Topics highlighted include intra-aortic balloon pump management, hemodynamic monitoring and pharmacology, and initiation and maintenance of the mechanically ventilated patient. Learning strategies include lecture with case presentations and a focus on critical thinking and decision making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1183 - FINANCE AND ACCOUNTING FOR HEALTH CARE - WEB

Minimum Credits: 2
Maximum Credits: 2
Finance and Accounting provides an introduction to the basic concepts of accounting and financial management in health care. The course is geared for professionals who do not anticipate serving primarily in a financial management role. The concepts will be studied in the context of their practical application.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

EM 1184 - SENIOR SEMINAR - WEB

Minimum Credits: 1
Maximum Credits: 1
Senior Seminar requires students to create a scholarly paper and presentation. Students are permitted to utilize the information gained during their internship if they desire. Students can also develop new materials based upon an approved topic in any health care area of interest to them.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

EM 1185 - BEYOND THE BODY - WEB

Minimum Credits: 3
Maximum Credits: 3
This course was designed to introduce clinicians and health administrators to variables that influence health beyond behaviors, genes, and germs. This course will introduce the "social ecology" model that addresses the broader social, environmental, and policy factors (known as "health determinants") that influence our health.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

EM 1186 - CERTIFIED AMBULANCE CODER - WEB

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide the student with a comprehensive understanding of the complex rules and requirements related to effective and compliant ambulance billing. The course focuses on a baseline of critical knowledge and commitment to excellence necessary to be a well-informed, conscientious, and compliant ambulance billing professional.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

EM 1187 - ORGANIZATIONAL THEORY - WEB

Minimum Credits: 3
Maximum Credits: 3
Through didactic and practical sessions, students will have the opportunity to discover organizational theory and to evaluate an EMS agency. Through this course students will learn about the 11 components of an EMS system and how to use them to evaluate an EMS system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

EM 1190 - CRITICAL CARE MEDICINE 1 - WEB

Minimum Credits: 3
Maximum Credits: 3
This course, deployed in a web-based format, provides a foundational review and focuses on advanced assessment and therapeutic intervention common in the critical care setting for both adult and pediatric patients. Emphasis is placed on continuum of critical care interventions during inter-facility transport. The course follows elements of the ASTNA core curriculum outline and elements of the PA DoH Pennsylvania Air Ambulance Transport Educational Program guidelines. Topics highlighted include body systems assessment, analysis of laboratory diagnostics, hemodynamic monitoring and pharmacology, and chemically facilitated management of the crash airway. Learning strategies include lectures with case presentations and a focus on critical thinking and decision making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

EM 1191 - CRITICAL CARE MEDICINE 2 - WEB

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.
Course Attributes: World Wide Web

EM 1199 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Provides students an opportunity to explore in depth an area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

EM 1250 - INTRODUCTION TO COMMUNITY HEALTH

Minimum Credits: 2
Maximum Credits: 2
The role of paramedics in the health care system is evolving in many parts of the country to include helping patients avoid unnecessary 911 calls and hospitalizations. This introductory course will prepare the paramedic to function as a community paramedic. This course will describe the difference between traditional EMS and community paramedic assessments; introduce therapeutic communication techniques; describe mental and behavioral health issues and their effect on chronic disease management; review professional boundaries and provider wellness techniques; and review potential patient populations that could be helped through these new services.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

EM 1251 - MOBILE INTEGRATED HEALTH CARE

Minimum Credits: 2
Maximum Credits: 2
Part two of the community paramedic introductory course will introduce therapeutic communication techniques that are essential for chronic disease management and the coordination of services needed to avoid the unnecessary utilization of EMS and hospital services. This course will discuss the business models used across the country for community paramedicine programs and the documentation methods used, as well as, how to design a program, and how to effectively become a patient advocate to help navigate the patient through the changing health care system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

EM 1260 - COGNITIVE PSYCHOLOGY OF DECISION MAKING

Minimum Credits: 2
Maximum Credits: 2
Health care providers make dozens of clinical decisions every day. Errors in cognitive processes have been determined to be one of the most common causes of preventable death and disability in this country. The goal of this class is to examine the current science of decision making and the barriers to optimal decision making. Students will learn to recognize System I and System II thinking and the benefits and limitations of each. Unconscious cognitive biases and heuristics that are commonly relied upon in everyday thinking, as well as professional decisions, will be analyzed. The class will be taught in seminar fashion with active learning and discussion.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

Engineering

ENGR 0005 - INTRODUCTION TO TECHNOLOGY IN INTERNATIONAL CONTEXT

Minimum Credits: 3
Maximum Credits: 3
Often engineering and science are considered to be culturally independent. This, however turns out not to be the case. This course examines the constructs of science and engineering education, the practice of engineering, and industry and their underlying cultural bases. When offered off-campus in a foreign country, this course will also include site visits and field work.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PROG: Swanson School of Engineering

ENGR 0011 - INTRO TO ENGINEERING ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Introduces students to basic topics in engineering, the role of the computer in engineering, ill structured problem-solving and report writing. The course includes material on the use of Unix, HTML, spread sheets, and MATLAB. Data analysis and curve fitting is done in both MATLAB and Excel. The writing component includes four detailed reports and includes an oral presentation. The course goals are: to introduce the fundamentals of what engineering is, what engineers do, why a diverse work force is needed and what values come with working in a group environment; to introduce the required library research skills and communication skills used by all engineers; to introduce the role of the computer in engineering problem solving, including the basic analytical, programming design, graphical, and problem solving skills used by most engineers in their profession; and to provide an overview of how material in the basic sciences and mathematics is applied by engineers to solve practical problems of interest to society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: ENGR 0081 and ENGCMP 0210; PROG: School of Engineering

ENGR 0012 - INTRO TO ENGINEERING COMPUTING

Minimum Credits: 3
Maximum Credits: 3
Introduces students to social topics in engineering, the role of the computer in engineering, ill-structured problem-solving and report writing. The course includes material on the use of MATLAB and C++. Students learn the fundamentals of computing in engineering, including program design, program development, and debugging. Applications to problems in engineering analysis with topics selected from ENGR 0011. The writing component includes four detailed reports and includes an oral presentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0011 (MIN GRADE 'C'); CREQ: MATH 0220 or 0230 or 0235 or 0240 or 0245 or 0280 or 0290; PROG: School of Engineering

ENGR 0015 - INTRODUCTION TO ENGINEERING ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Introduces students to basic topics in engineering, the role of the computer in engineering, ill-structured problem-solving and report writing. The course includes material on the use of UNIX, HTML, spread sheets, and MATLAB. Data analysis and curve fitting is done in both MATLAB and Excel. The writing component includes four detailed reports and includes an oral presentation. The course goals are: to introduce the fundamentals of what engineering is, what engineers do, why a diverse work force is needed and what values come with working in a group environment; to introduce the required library research skills and communication skills used by all engineers; to introduce the role of the computer in engineering problem solving , including the basic analytical, programming design, graphical, and problem solving skills used by most engineers in their profession; and to provide an overview of how material in the basic sciences and mathematics is applied by engineers to solve practical problems of interest to society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: (MATH 0220 or 0235) and (PHYS 0174 or 0475)

ENGR 0016 - INTRODUCTION TO ENGINEERING COMPUTING

Minimum Credits: 3
Maximum Credits: 3
Introduces students to social topics in engineering, the role of the computer in engineering, ill-structured problem-solving and report writing. The course includes material on the use of MATLAB and C++. Students learn the fundamentals of computing in engineering, including program design, program development, and debugging. Applications to problems in engineering analysis with topics selected from ENGR 0015. The writing component includes four detailed reports and may include an oral presentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0011 or 0015) and (MATH 0220 or 0235) and (PHYS 0174 or 0475) and PREQ or CREQ: (ENGCMP 0200 or 0203 or 0205 or 0207 or 0208 or 0212 or 0250 or 0004 0006 0020) or (FP 0003 or 0006) or ENG 0102; CUM GPA 2.0 or greater

ENGR 0020 - PROBABILITY AND STATISTICS FOR ENGINEERS 1

Minimum Credits: 4
Maximum Credits: 4
An introductory course in statistics. Topics covered include: data analysis, probability, random variables, selected discrete and continuous probability distributions, one sample and two sample estimation, hypothesis testing, experiments with two factors and introduction to regression analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0150 or 0230 or 0231 or 0235; PROG: Swanson School of Engineering
Course Attributes: SCI Quantitative: Statistics GE. Req.

ENGR 0022 - MATERIALS STRUCTURE AND PROPERTIES

Minimum Credits: 3
Maximum Credits: 3
An introduction to the basic concepts of materials science and engineering. The concepts of atomic, crystal, micro- and macro-structure, their control and effects on chemical, electrical, magnetic, optical, and mechanical properties. Modification of properties by heat treatment and control of processing. Fundamental considerations in materials selection.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0150 or 0230 or 0231 or 0235) and (PHYS 0150 or 0174 or 0201 or 0475); PROG: School of Engineering

ENGR 0023 - PLUS 3 COSTA RICA

Minimum Credits: 3
Maximum Credits: 3
The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Latin American Studies, Pitt Class

ENGR 0024 - INTERNATIONAL FIELD PROJECT - CHINA

Minimum Credits: 3
Maximum Credits: 3
The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Pitt Class

ENGR 0025 - INT'L FIELD PROJ-CZECH REPUBLC

Minimum Credits: 3
Maximum Credits: 3

The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

ENGR 0026 - INTERNATIONAL FIELD PROJECT - GERMANY

Minimum Credits: 3
Maximum Credits: 3
The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Pitt Class

ENGR 0027 - INTERNATIONAL FIELD PROJECT- FRANCE

Minimum Credits: 3
Maximum Credits: 3
The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 0028 - ENGR+2: INT'L FIELD PROJ - CHILE

Minimum Credits: 2
Maximum Credits: 2
Engr+2 is an optional two-credit study abroad opportunity offered. In 2003 the course will involve a field study trip to Santiago Chile. The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Latin American Studies

ENGR 0029 - INT'L FIELD PROJECT - CHILE

Minimum Credits: 1
Maximum Credits: 1
This one-credit project is for students who participated in the Chile summer program. Students will work in small groups to design, coordinate and create web pages. The project entails video processing and editing, source searching on the internet, and interviewing university experts on Chile. A short paper connecting the interviews and the special trading status that the US gave to Chile recently will also be required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: Latin American Studies

ENGR 0031 - PLUS 3 ITALY

Minimum Credits: 3
Maximum Credits: 3
The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Course Requirements: PROG: Swanson School of Engineering
Course Attributes: Latin American Studies, Pitt Class

ENGR 0032 - INTERNATIONAL FIELD PROJECT - BRAZIL

Minimum Credits: 3
Maximum Credits: 3
The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering
Course Attributes: Latin American Studies, Pitt Class

ENGR 0033 - PLUS 3 VIETNAM

Minimum Credits: 3
Maximum Credits: 3
Plus 3 Vietnam
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Pitt Class

ENGR 0034 - ENGINEERING PERSPECTIVES OF THE RENAISSANCE AND SUSTAINABILITY: FLORENCE & VENICE

Minimum Credits: 3
Maximum Credits: 3
Engineering Perspectives of the Renaissance and Sustainability: Florence & Venice
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Pitt Class

ENGR 0035 - PLUS 3 KOREA

Minimum Credits: 3
Maximum Credits: 3
The course involves lectures, company visits and sightseeing, and culminates in a research paper and presentation that focuses on a global industry and its value chain.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

ENGR 0081 - FRESHMAN ENGINEERING SEMINAR 1

Minimum Credits: 0
Maximum Credits: 0
An in-depth orientation in the various areas of engineering and the related fields of employment. Includes small group meetings with departmental representatives and special freshman academic advisors. A formal departmental choice is made at the conclusion of these courses.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: CREQ: ENGR 0011 or 0711; PROG: Swanson School of Engineering

ENGR 0082 - FRESHMAN ENGINEERING SEMINAR 2

Minimum Credits: 0
Maximum Credits: 0

An in-depth orientation in the various areas of engineering and the related fields of employment. Includes small group meetings with departmental representatives and special freshman academic advisors. A formal departmental choice is made at the conclusion of these courses.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: CREQ: ENGR 0012 or 0712 or 0715 or 0716; PROG: Undergraduate Swanson School of Engineering

ENGR 0087 - TRANSFER SEMINAR

Minimum Credits: 0
Maximum Credits: 0
A 9 week seminar course for first semester regional and external engineering transfer students. The course discusses the transition to the Swanson School of Engineering and resources available to students at the University of Pittsburgh.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

ENGR 0088 - LEARNING AND COUNSELING

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

ENGR 0089 - COUNSELING

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

ENGR 0090 - SWANSON SUCCESS PROGRAM: A FRAMEWORK FOR ACADEMIC SUCCESS

Minimum Credits: 0
Maximum Credits: 0
The Swanson success class provides students with a series of academically-focused workshops critical to success within the Swanson School of Engineering and at the University of Pittsburgh. In this course, students will explore a variety of personal development topics including goal-setting, time prioritizing, motivation, and learning strategies. Students who invest the time and energy into this course, which is just one component of the student retention program, can expect to enhance their academic and personal efficiency as well as their performance in the classroom.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis

ENGR 0131 - STATICS FOR CIVIL AND ENVIRONMENTAL ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
A basic course in statics. Utilizing the free-body diagram, the course covers forces and equilibria of particles, rigid bodies, surfaces, trusses, beams, cables, and other basic structural elements. Use is made of computers for problem solving.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PHYS 0104 or 0150 or 0174 or 0201; PROG: Swanson School of Engineering

ENGR 0135 - STATICS & MECHC OF MATERIALS 1

Minimum Credits: 3
Maximum Credits: 3
First of a two course sequence covering statics and strength of materials. Topics covered include: concurrent force systems, equilibrium, axial loading, stress, strain, deformation, moments, equivalent systems, centroids, centers of mass, and distributed loads, free-body diagrams, equilibrium of rigid and deformable bodies, plane trusses, frames and machines, equilibrium in 3D, torsion and friction. Use is made of computers for problem solving.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0150 or 0230 or 0231 or 0235) and (PHYS 0150 or 0174 or 0201 or 0475); PROG: School of Engineering

ENGR 0141 - MECHANICS OF MATERIALS CIVIL AND ENVIRONMENTAL ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
An introductory course in the mechanics of deformable bodies, with special application to the range of topics needed by civil engineers. The course material covers internal strains, stresses and deformations which occur when a structure is subjected to applied loads. Problems with tie-in to practical design issues will be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0131 or 0135 or ET 0051; PROG: Swanson School of Engineering

ENGR 0145 - STATICS & MECHC OF MATERIALS 2

Minimum Credits: 3
Maximum Credits: 3
Second of a two course sequence covering statics and strength of materials. Topics include: flexure; second moment of areas, shear force and bending moment diagrams, composite beams, shearing stresses, beam deflections, energy methods, Castigliano's methods, moment area method, combined static loading and columns.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0135 or ET 0051); PROG: School of Engineering

ENGR 0151 - DYNAMICS CIVIL & ENVRN ENGNRS

Minimum Credits: 3
Maximum Credits: 3
A basic course in dynamics. Utilizing the Newtonian mechanics of particles, the course covers kinematics and kinematics of particles, kinetics of systems of particles, work and energy, introduction to vibration, single-degree-freedom systems, and two-degrees-of-freedom systems. Applications of dynamics in civil engineering problems. Use is made of computer solution to a two-story building vibration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0141 or 0145 or ET 0053) and (MATH 0250 or 0290 or 1035 or 0202); PROG: Swanson School of Engineering

ENGR 0240 - NANOTECHNOLOGY AND NANO-ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This research-oriented course is a multidisciplinary course taught by a faculty team including a professor of electrical engineering and a professor of chemistry. The course introduces nanoscale devices created from a range of nanomaterials including carbon nanotubes (CNTS), nanoparticles (NPS), and nanowires (NWS). Theories of operation, fabrication techniques and applications of Nano devices will be discussed. The course combines lecture, laboratory work, and web-supported project-based learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0230 or 0235 or 0150 or 0221) and [PHYS 0175 or 0476 or (0201 and 0203) or (0150 and 0151)]; PROG: Swanson School of Engineering

ENGR 0241 - FABRICATION AND DESIGN IN NANOTECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
This overview course examines approaches to top-down and bottom-up nanofabrication and device manufacture; engineering design with nanomaterials, components, and systems; case studies of cutting-edge nanotechnologies (e.g., The `ipod' microdrive, nanoparticle drug delivery, etc.), Commercialization, intellectual property, and venture capital; seminar series.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0175 or 0476 or 0770 or 0152 or 0202) and (CHEM 0120 or 0720 or 0770 or 0970 or 0102 or 0112); PROG: Swanson School of Engineering

ENGR 0501 - MUSIC ENGINEERING LABORATORY

Minimum Credits: 1
Maximum Credits: 1
A course directed toward development of basic skills in recording engineering through expanded understanding of the science and engineering of music. The course will use the music engineering laboratory (MEL) located in Benedum hall. The MEL is a state of the art sound recording facility with research and educational capabilities for sound recording and music engineering. Students are expected to have prior musical experience, working knowledge of Fourier transforms, and working knowledge of basic electronics. Topics covered: recording engineering (microphones, amplifiers, and mixing, filtering, special effects). Physics, mathematics, and psychophysics of sound and music (acoustics, speech and singing, hearing, pitch, stereo perception). Musical instrument function (mechanical and electronic)
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 0711 - HONORS ENGINEERING ANALYSIS AND ENGINEERING COMPUTING

Minimum Credits: 3
Maximum Credits: 3
This is an accelerated course in computer fundamentals and engineering applications. The material of ENGR 0711 covers the material in both ENGR 0011 and ENGR 0012. The course is at an accelerated pace and then a variety of engineering design analysis and solution techniques are presented. It introduces students to basic topics in engineering, the role of the computer in engineering, ill-structured problem-solving and report writing. The course includes material on the use of Unix, HTML, spread sheets, MATLAB and C++. Students learn fundamentals of computing in engineering including program design, program development, and debugging. Applications to problems in engineering analysis are included in the course. The writing component includes four detailed reports and includes an oral presentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0220; COREQ: (MATH 0230 or 0235 or 0240 or 0290) and ENGR 0081; PROG: Swanson School of Engineering; Minimum GPA 3.25
Course Attributes: University Honors Course

ENGR 0712 - ADVANCED ENGINEERING APPLICATIONS FOR FRESHMAN

Minimum Credits: 3
Maximum Credits: 3
This is an honors course and a continuation of ENGR 0711. Students will be introduced to engineering research and various special topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0711; PROG: Undergraduate Swanson School of Engineering

ENGR 0715 - ENGINEERING APPLICATIONS FOR SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This service learning course will initially focus on applications in medicine and rehabilitation treatment. Students will work in teams as they address a critical clinical problem, examining issues from both the patient and physician perspectives. Future years will introduce environmental and sustainability problems.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0711; PROG: Undergraduate Swanson School of Engineering

ENGR 0716 - ART OF HANDS-ON SYSTEM DESIGN AND ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Engineering is fundamentally a creative process in which ideas are generated and transformed into new systems and devices in the world to meet human needs. The term engineer shares its origins with ingenious: one definition of engineer is 'a skillful inventor.' In this course, we will explore tools and techniques for inventing, designing and prototyping systems. Through discussion, small-team activities, workshops and hands-on projects, students will obtain an introduction to design thinking, 'maker culture' and systems engineering. We will explore user-centric design principles; sketch modeling; basic building elements for systems such as sensors, computer controllers, actuators and displays; materials and methods for prototyping; and ways to analyze and troubleshoot systems. Students will gain an introduction to 'smart systems': automated systems that can sense the world and automatically respond in useful ways. We will also focus on the user interface: how to create control and display interfaces that enhance users' ability to operate systems effectively and efficiently.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0711; CREQ: ENGR 0082; PLAN: Undeclared

ENGR 1000 - LAB EXPERIENCES

Minimum Credits: 0
Maximum Credits: 0
Provide opportunities to students to volunteer in a research lab to determine if undergraduate research is an area that the student would like to further engage in for course credits, for payment from a PI, or for summer research experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: LEVEL: Undergraduate; PROG: Swanson School of Engineering

ENGR 1010 - COMMUNICTN SKILLS FOR ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
Utilizing a variety of spoken, written, and audio-video activities, the students learn how to give instructions, use feedback, listen, conduct the job and appraisal interview. Run meetings, use groups, make presentations, manage crises...Most of the skills they need to strengthen their personal, interpersonal, group and organizational communicative skills. The instructing-learning process emphasizes motivation, concentration, participation, organization, comprehension, repetition, articulateness, and confidence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering
Course Attributes: Global Studies

ENGR 1011 - MODERN MACHINING PROCESSES

Minimum Credits: 2
Maximum Credits: 2
This course is designed to introduce the student to modern machining processes and engineering materials through theory and active learning
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1012 - MODERN MACHINING PROCESSES BASIC LAB

Minimum Credits: 1
Maximum Credits: 1
This introduction lab is designed to introduce the student to machining processes through theory, active learning and hands-on training on industry grade machine tools.

Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

ENGR 1013 - MODERN MACHINING PROCESSES ADVANCED LAB

Minimum Credits: 3
Maximum Credits: 3
This advanced lab is designed to train students in modern machining processes through theory, active learning and hands-on training on industry grade machine tools.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Grad Letter Grade

ENGR 1014 - CNC THEORY AND OPERATION

Minimum Credits: 2
Maximum Credits: 2
This course is designed to introduce the student to the theory, programming and operation of computer controlled manufacturing machines. Course will cover topics using active learning and hands-on training projects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1015 - CNC THEORY AND OPERATION - BASIC LAB

Minimum Credits: 1
Maximum Credits: 1
This introduction lab is designed to introduce the student to the programming and operation of computer controlled manufacturing machines with industry grade machine tools.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

ENGR 1016 - CNC THEORY AND OPERATION - ADVANCED LAB

Minimum Credits: 3
Maximum Credits: 3
This advanced lab is designed to train students in extensive programming and operation of computer controlled manufacturing machines with industry grade machine tools.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

ENGR 1017 - MANUFACTURING FOR THE FUTURE: FLEXIBLE, GREEN, AND DIGITAL

Minimum Credits: 3
Maximum Credits: 3
What is flexible device manufacturing? What is green manufacturing? What is cybermanufacturing? Importantly, how do these emerging "types" of manufacturing differ from traditional manufacturing? It is important to recognize that global manufacturing is undergoing major transformations nowadays. The confluence of new advanced materials, emerging fabrication technologies, and connected cyber-physical systems is creating paradigm shifts for the ways products are conceived, made, distributed, used, and disposed. In the ever-increasing competition of "making things" of value to consumers, many industries are now reinventing themselves to cope with this new reality. This class covers the fundamentals behind major global trends, and their implication for the future of manufacturing from an engineering perspective. Topics covered include the following: (1) How the need for flexible and wearable devices is driving innovation in new materials and fabrication processes beyond the traditional microfabrication techniques adopted in the semiconductor industry. (2) How protein-based materials, degradable polymers, and novel recycling technologies are paving the way for more sustainable manufacturing of consumer products. (3) How data analytics and internet of things (IoT) technologies are enabling a new generation of digital manufacturing systems referred to as Industry 4.0, and beyond.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1030 - ENGINEERING FOR HUMANITY SERVICE LEARNING PROJECT

Minimum Credits: 1
Maximum Credits: 3
A service learning project in which social and/or environmental sustainability is a core thrust. The project is guided by an approved member of faculty from the Swanson school of engineering and satisfies a requirement of the engineering for humanity certificate program. The project can be international or based within the US and is subject to pre-approval.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1050 - PRODUCT REALIZATION

Minimum Credits: 3
Maximum Credits: 3
This interdisciplinary course will focus on product analysis, product redesign and product development. Student teams will work with industrial sponsors to develop product plans for emerging and existing products.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Capstone Course

ENGR 1060 - SOCIAL ENTREPRENEURSHIP- ENGINEERING FOR HUMANITY

Minimum Credits: 3
Maximum Credits: 3
The course will explore the concepts of social entrepreneurship through the three tenets of sustainability: environment, economy, and equity in the context of complex or `wicked' problems. An introduction will provide a foundation in sustainability and social entrepreneurship while exploring the impact of innovative business models, such as disruptive innovation and Prahalad and Hart's fortune at the bottom of the pyramid. Additional class time will explore different examples and challenges in the developed and developing worlds. Through weekly readings, the course will focus on classroom discussions about the tenets of sustainability and the relevance of engineering in crafting `solutions'. The course project will provide students with an opportunity to work with a multi-disciplinary team to design an engineering-based business plan targeting a specific challenge either locally or in the developing world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1061 - INTRAPRENEURSHIP: ENTREPRENEURSHIP WITHIN THE CORPORATION

Minimum Credits: 3
Maximum Credits: 3
This course explores the developing practice of intrapreneurship which is defined as the application of entrepreneurial principles in a corporate environment for the creation of new products and businesses. The focus will be on providing the student with the needed awareness of cultural and political barriers while providing a specific tool set targeted at maximizing new business as well as career success. The course is designed for junior and senior engineering students who have already had some work experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1062 - START UP FUNDAMENTALS

Minimum Credits: 3
Maximum Credits: 3
This course is offered within the Swanson School of Engineering to undergraduate and graduate students. At the undergraduate level, the class is part of the new Certificate in Innovation, Product Design and Entrepreneurship. The class is designed to introduce the student to the core business concepts behind innovation and entrepreneurship. The class is highly interactive, and students will be required to participate in groups and individually. Grading is heavily weighted around participation in the group project which will be ongoing throughout the semester. The class is taught by Babs Carryer, Director of Education & Outreach, Innovation Institute at Pitt. Guest speakers, who are experts in their fields, will supplement the core teaching. Topics covered will include: ideation, problem/solution, market opportunity, competitive analysis, customer discovery, pitching, funding, finance, legal issues, team building, and innovation within existing companies.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1066 - INTRODUCTION TO SOLAR CELLS AND NANOTECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
Introduction to solar cells and nanotechnology this course aims to prepare Undergraduate students in the design and development of low-cost, high-efficiency solar cells. Students will learn the basics of solar cells, introduce themselves to nanotechnology and how this may enable next-generation solar cells, learn how to use instruments for synthesis and characterization of nanomaterials and solar cells, examine the social implication of nanotechnology and solar cells, and practice problem solving and engineering design skills within a collaborative team. Portions of the class will be flipped (video lectures at home and assignments in class) in order to facilitate an active and engaged learning process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PHYS 0175; PROG: Swanson School of Engineering

ENGR 1075 - ENERGY DEVELOPMENT, USE, AND IMPACT

Minimum Credits: 3
Maximum Credits: 3
This course will serve as an overview of energy engineering for both non-engineers and engineers and will be taught in a combined lecture/seminar format. While the course is broadly based it does not cover all aspects of energy harvesting and use. Topics include the history of energy use, the types of energy used (fossil fuel, nuclear, renewables, energy efficiency, energy economics, and climate change). Because of the seminar format, some topics can be covered more fully than others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Instructor Consent Required; PROG: Swanson School of Engineering

ENGR 1080 - LEAN LAUNCHPAD: EVIDENCE-BASED ENTREPRENEURSHIP

Minimum Credits: 3
Maximum Credits: 3
Conventional wisdom regarding starting a business is dead wrong. This conclusion led Steve Blank and others to develop the lean startup method, an approach for systematically exploring the business model needed to make an idea into a success. In Blank's own words: 'existing companies execute a business model, startups search for one. This distinction shapes the lean definition of a startup: a temporary organization designed to search for a repeatable and scalable business model.' In this course, we discuss the basic elements of the lean startup method and apply them to the domain of engineering product and customer development. Students are expected to come to the class with their own idea(s) for potential product offering(s), which they will then test using the lean startup approach over the course of the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1090 - ENGINEERING COOPERATIVE PROGRAM

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3

ENGR 1090J - ENGINEERING COOPERATIVE PROGRAM - UPJ

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Basis

ENGR 1090P - ENGINEERING COOPERATIVE PROGRAM - PITTSBURGH

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Basis

ENGR 1091 - SCHOOL OF ARTS AND SCIENCES COOPERATIVE EDUCATION

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3
Course Attributes: Capstone Course

ENGR 1092 - ENGRG INT'L COOPERATIVE PROGRAM

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Basis

ENGR 1093 - CMP SCI COOPERATIVE PROGRAM

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3
Course Attributes: Capstone Course

ENGR 1097 - INTERNATIONAL SPECIAL PROJECT

Minimum Credits: 3
Maximum Credits: 3
This course involves an individual project done under the supervision of a university of Pittsburgh engineering faculty member and a faculty member of a foreign university. The project is done on site at the foreign university and involves an experimental study, a design project, a literature review of a special topic, or instruction.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

ENGR 1098 - INTERNATIONAL SENIOR DESIGN EXPERIENCE

Minimum Credits: 1
Maximum Credits: 1
This one credit course is focused on understanding globalization and technology with a particular emphasis on sustainability design and international experience. By the end of this course, students should understand the basic history, government, and economic strategies, related to their country; produce a final design that is the most cost-effective design possible, as funding for construction is limited and repairs in the future would be undertaken by members of the community; be able to define 'globalization' and 'sustainability' and identify how it is impacting their respective fields of study and future employment; gain awareness of differences in the business environments of the U.S. In relationship to the rest of the world.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

ENGR 1099 - SPECIAL PROJECT

Minimum Credits: 3
Maximum Credits: 3
Student develops an individual project under supervision of a faculty member. Project may be experimental, design oriented, or instructional. A written report is prepared.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

ENGR 1150 - ENGR STUDY ABROAD RETURNEE PROFESSIONAL DEVELOPMENT

Minimum Credits: 1
Maximum Credits: 1
This one-credit course is designed for engineering students who have recently returned from a global experience. In addition to strategies for enhancing intercultural perspectives and coping with re-entry challenges, students will learn how to translate skills learned abroad into professional competencies and build on their academic, professional, and personal development as future global engineers. Through comparative discussion and analysis, project-based learning, and professional development workshops, students will break down and learn to frame experiences abroad in a contemporary context. Mastery will be demonstrated through written and oral communication.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

ENGR 1200 - STUDY ABROAD: MEXICO

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Latin American Studies, Non-Pitt Class

ENGR 1201 - STUDY ABROAD: ISRAEL

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Attributes: Pitt Class, Pitt Student

ENGR 1202 - STUDY ABROAD: ISRAEL NP

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Attributes: Non-Pitt Student, Pitt Class

ENGR 1203 - PITT ENGINEERING IN CHINA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required

ENGR 1204 - PITT ENGINEERING IN CHINA NP

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate

Course Component: Independent Study
Grade Component: No Grade Required

ENGR 1205 - PITT ENGINEERING IN AUSTRALIA ET

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required

ENGR 1206 - PITT ENGINEERING IN AUSTRALIA 2K

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required

ENGR 1207 - PITT ENGINEERING AUSTRALIA ET NP

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required

ENGR 1208 - PITT ENGINEERING AUSTRALIA 2K NP

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required

ENGR 1209 - STUDY ABROAD: COSTA RICA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Latin American Studies, Non-Pitt Class

ENGR 1210 - STUDY ABROAD: FRANCE

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1210IS - INSA LYON: FRANCE IN-STATE - IS

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Attributes: Pitt Class

ENGR 1210OS - INSA LYON: FRANCE OUT-OF-STATE

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Pitt Class

ENGR 1211 - STUDY ABROAD: SWITZERLAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1212 - STUDY ABROAD: FRANCE

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1213 - ENGR SERVICE LEARNING: BRAZIL

Minimum Credits: 6
Maximum Credits: 6
This course examines the development and practice of science and engineering in the context of their underlying cultural bases (social, political, religious, and organizational). The goal of the course is not just to understand the practice of technology in one country versus another, but to develop analytical skills for analyzing technology in any international setting. The course is designed for students from a wide variety of backgrounds and majors; engineering background is useful but not necessary.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: No Grade Required
Course Attributes: Latin American Studies

ENGR 1214 - STUDY ABROAD: GHANA

Minimum Credits: 3
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1215 - STUDY ABROAD: HONG KONG

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1216 - STUDY ABROAD: PERU

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1217 - STUDY ABROAD: SINGAPORE

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1218 - STUDY ABROAD: SEMESTER-AT-SEA

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1219 - STUDY ABROAD: ECUADOR

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1220 - STUDY ABROAD: CANADA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1221 - STUDY ABROAD CHILE

Minimum Credits: 3
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1222 - STUDY ABROAD: RUSSIA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class, Russian & East European Studies

ENGR 1223 - EXCHANGE ENGLAND-UNIVERSITY OF SUSSEX

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1224 - GLOBAL ENGINEERING EDUCATION EXCHANGE: NANYANG TECHNICAL UNIVERSITY, SINGAPORE

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1225 - STUDY ABROAD: SOUTH AFRICA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1226 - STUDY ABROAD: HUNGARY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class, Russian & East European Studies

ENGR 1227 - EXCHANGE GERMANY-FH MUNICH

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1228 - EXCHANGE URUGUAY-UNIVERSITY OF MONTEVIDEO

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Latin American Studies

ENGR 1229 - STUDY ABROAD: TURKEY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class, Russian & East European Studies

ENGR 1230 - STUDY ABROAD: DENMARK

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1231 - STUDY ABROAD: TANZANIA

Minimum Credits: 3
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ENGR 1232 - ENGINEERING EXCHANGE: JAPAN

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: Study Abroad

ENGR 1233 - GE3 EXCHANGE: HONG KONG UNIVERSITY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1234 - EXCHANGE: UNIVERSITIES OF APPLIED SCIENCE EXCHANGE, GERMANY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1235 - STUDY ABROAD: CHINA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ENGR 1236 - STUDY ABROAD: BRAZIL

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1237 - STUDY ABROAD: CYPRUS

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class, Russian & East European Studies

ENGR 1238 - STUDY ABROAD: ISRAEL

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1239 - STUDY ABROAD: URUGUAY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

ENGR 1240 - STUDY ABROAD: ENGLAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1241 - STUDY ABROAD: SCOTLAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1242 - STUDY ABROAD: INDIA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1243 - EXCHANGE: NATIONAL UNIVERSITY OF SINGAPORE

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

ENGR 1244 - EXCHANGE: FIPSE CAPES BRAZIL

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1245 - STUDY ABROAD: IRELAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1246 - GLOBAL ENGINEERING EDUCATION EXCHANGE: SPAIN

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1247 - GE3 EXCHANGE: ENGLAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1248 - GE3 EXCHANGE: AUSTRIA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1249 - GLOBAL ENGINEERING EDUCATION EXCHANGE: FRANCE

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1250 - STUDY ABROAD: JAPAN

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1251 - GE3 EXCHANGE: AUSTRALIA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1252 - GLOBAL ENGINEERING EDUCATION EXCHANGE: MIDDLE EAST TECHNICAL UNIVERSITY, TURKEY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Russian & East European Studies

ENGR 1253 - GLOBAL ENGINEERING EDUCATION EXCHANGE: JAPAN

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGR 1254 - EXCHANGE: UNIVERSITY OF EXETER

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1255 - STUDY ABROAD: KOREA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1256 - ENGINEERING IN THE AMERICAS

Minimum Credits: 3
Maximum Credits: 3
Traveling throughout Latin America one can encounter stunning examples of engineering expertise, from the Aztec and Mayan pyramids and cities such as Tenochtitlan, Palenque and Tikal, to the lost city of the Inca, Machu Picchu, to name just a few. This course is designed to introduce students to the methods employed in the design and construction of these and other major Pre-Columbian structures, and to analyze why these structures have remained stable in the face of time and natural hazards. Factors which made pre-Columbian engineers so effective will be analyzed using basic principles of civil engineering. The class will consist of preparatory lectures, discussion, exercises, a site visit to Cuzco and Machu Picchu (Peru), and debriefings subsequent to the site visit.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1257 - EXCHANGE: GLOBEX IN CHINA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1258 - STUDY ABROAD: POLAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Pitt Class

ENGR 1259 - ENGINEERING EXCHANGE: YONSEI

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1260 - STUDY ABROAD: AUSTRIA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1261 - GLOBAL ENGINEERING EDUCATION EXCHANGE: ISRAEL

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1262 - STUDY ABROAD: ARGENTINA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Attributes: Study Abroad

ENGR 1263 - GE3 EXCHANGE: LUND UNIVERSITY

Minimum Credits: 3
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1264 - STUDY ABROAD: CZECH REPUBLIC

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Non-Pitt Class

ENGR 1265 - STUDY ABROAD: ITALY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1266 - EXCHANGE: GLOBAL E3

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1267 - GLOBAL ENGINEERING EDUCATION EXCHANGE: SOUTH KOREA

Minimum Credits: 1
Maximum Credits: 18
Global Engineering Education Exchange: South Korea
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1270 - STUDY ABROAD: AUSTRALIA

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1275 - STUDY ABROAD: WALES

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1276 - ENGINEERING DESIGN FOR SOCIAL CHANGE: SOUTH AFRICA

Minimum Credits: 3
Maximum Credits: 3
Engineering design for social change: South Africa
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

ENGR 1280 - STUDY ABROAD: GERMANY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1281 - CLEAN ENERGY GRID ENGINEERING: SCANDINAVIA UG

Minimum Credits: 3
Maximum Credits: 3
The course will cover the application of various grid technologies from power generation through power consumption including transmission networks, grid automation, power electronics systems, communications and control, protection, grid operations, grid connectivity, renewable energy resource integration, cyber security, micro grids, DC technologies, and other emerging areas, as well as a brief introduction to power utility markets, business processes, and policy/regulation. Through classroom discussion and an assortment of group exercises, you learn to frame contemporary energy production and utilization issues in societal and global contexts, and demonstrate mastery of the issues through written and oral communication.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

ENGR 1282 - GERMAN ENGINEERING CULTURE UG

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the day-to-day business issues facing German engineers. The course will cover service businesses in Germany, workplace culture, digital factories, engineering law in Germany and a project that will tackle solving real engineering problems. Students learn to analyze typical German cultural aspects in order to understand differences in the social system of a company and use the knowledge to improve the processes and structures. Students work with appropriate analytical methods and apply their knowledge on real business examples, given by experienced international Managers.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1285 - STUDY ABROAD: NEW ZEALAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1290 - STUDY ABROAD: SPAIN

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1295 - STUDY ABROAD: SWEDEN

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1296 - STUDY ABROAD: ICELAND

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Non-Pitt Class

ENGR 1300 - ENERGY TOMORROW

Minimum Credits: 6
Maximum Credits: 6
This course explores energy efficiency and renewable energy technologies. Areas addressed are: world energy, energy and environmental implications, energy storage, wind and solar thermal applications, energy and the built environment, biomass and liquid fuels, photo voltaic devices and systems, energy management and energy and transport.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1350 - SUMMER EDGE: MUNICH

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1351 - SUMMER EDGE: AUSTRALIA

Minimum Credits: 1
Maximum Credits: 15
Summer edge: Australia
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1352 - STUDY ABROAD: NETHERLANDS

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: Study Abroad

ENGR 1410 - EXCHANGE: CONTROL AND SYSTEMS: ROUEN, FRANCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1411 - EXCHANGE: KOREA UNIVERSITY

Minimum Credits: 1
Maximum Credits: 18
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGR 1420 - EXCHANGE GLOBAL ENGINEERING EXPERIENCES: ROUEN, FRANCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis

ENGR 1430 - PORTUGUESE 3 FOR ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
This third semester of Brazilian Portuguese is specifically designed for engineering students who will be doing research and/or studying in brazil. The course covers technical and educational terminology through examination of Brazilian sustainable engineering case studies while further advancing the students' knowledge and ability in Brazilian Portuguese. The course will further enhance the cognitive skills of engineering students, and give them an appreciation of the interrelation of career paths, language skills, and cultural awareness. This course is required for all IGERT fellows.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1450 - ENGINEERING- THE GERMAN WAY

Minimum Credits: 3
Maximum Credits: 3
This course highlights the German approach to engineering from various perspectives. It is designed as mixture of in-class lectures and industrial experience in the form of factory tours. Four broad topics are addressed from the German perspective: (1) R&D; management, (2) production and manufacturing systems, (3) digital factory layout and factory simulation, and (4) product-ergonomics and ergonomic aspects in manufacturing. In addition students select one of two additional options dealing with unique aspects of the German business economy: (1) the nature of cooperation between trade unions and employers or (2) the impact on technology law and harmonization on engineering in Europe.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Pitt Class

ENGR 1500 - ETHICAL DILEMMAS BALANCING COST, RISK, AND SCHEDULING

Minimum Credits: 3
Maximum Credits: 3
Students will explore the interfaces among engineering ethics, design, schedules, costs and risk assessment. Teamwork, communications and management skills will also be developed. Students will analyze a series of well-known cases, as well as discussing current ethical situations involving engineers and engineering managers. Students will learn to recognize and resolve the types of ethical dilemmas that they could encounter in the workplace. A term paper serves to integrate and extend the entire course material.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1600 - INTERNATIONAL TECHNOLOGY: INNOVATION AND LEADERSHIP

Minimum Credits: 3
Maximum Credits: 3
Globalization and innovation will be studied with a particular emphasis on China in conjunction with the Innovate 2012 conference. As such the course provides both the preparation for the conference and the post-conference synthesis of what was learned during the conference. The course will be jointly taught by University of Pittsburgh and Rice University faculty exclusively for those students who will be delegates to the Innovate

Conference. Guest lecturers will be invited from the two participating universities who will discuss the history, government, religion, business climate and culture of China. This course requires participation in the Innovate 2012 Symposium that will visit Beijing, Suzhou, and Shanghai, China from March 1 - 11.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1601 - INTERNATIONAL TECHNOLOGY: INNOVATION AND LEADERSHIP (NON-PITT)

Minimum Credits: 3
Maximum Credits: 3
Globalization and innovation will be studied with a particular emphasis on china in conjunction with the Innovate 2012 conference. As such the course provides both the preparation for the conference and the post-conference synthesis of what was learned during the conference. The course will be jointly taught by university of Pittsburgh and rice university faculty exclusively for those students who will be delegates to the innovate conference. Guest lecturers will be invited from the two participating universities who will discuss the history, government, religion, business climate and culture of china. This course requires participation in the Innovate 2012 symposium that will visit Beijing, Suzhou, and Shanghai China from March 1- 11.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1620 - PRODUCT DESIGN AND DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
The focus of product design and development is integration of the marketing design and manufacturing functions of firms in creating new products in a diverse economy that is experiencing rapid growth. Students will analyze several case-studies within the Indian context to study the multiple stages involved with new product creation, design, engineering, and production. The importance of creating new products suited for rural-agricultural settings which are eco-friendly and satisfy sustainable economic communities will be addressed throughout the course. Topics include: discuss the set of tools and methods for product design and development; develop abilities to create a new product; awareness of the role of multiple functions in creating a new product (e.g. Marketing, finance, industrial design, engineering, production); ability to coordinate multiple, interdisciplinary tasks in order to achieve a common objective (examine local conditions, needs and constraints; case studies (to be gathered from various sources).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1623 - ENGINEERING FOR A BETTER ENVIRONMENT: BRAZIL

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: Pitt Class

ENGR 1625 - ENGINEERING BUSINESS COLLABORATIONS IN INDIA

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the studying modern engineering and business principles, methods, and tools, within the context of the Indian environment. The three focal areas of study are: manufacturing systems, service engineering operations, and call centers. A visit to India will showcase challenges and opportunities available at the corporate level and at the individual level in this rapidly growing economy. It will also focus on the societal impacts of new technologies and rapid expansion of engineering industries in India. Students can utilize this forum to analyze and visualize service manufacturing engineering challenges and opportunities around the world. Plant visits and interfaces with engineering students and practicing engineers will allow students to appreciate the following professional characteristics: ethics, the ability to work with others, an appreciation for other disciplines, adaptability, and an appreciation for life-long learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1627 - CHINA TODAY: INDUSTRY, INNOVATION, EDUCATION

Minimum Credits: 1
Maximum Credits: 1
This short course will educate students on the impact of modern china on engineering solutions in a global and societal context, improve student's knowledge of contemporary issues relating to the engineering and business profession. At the end of the course, students will have a general understanding of the corporate, geo-political, cultural and social factors that define the Chinese landscape at the present time. An in-depth paper exploring one of these factors will be required. This short course will explore how these three factors interact in china and in the perceived position of china as a world economy.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1628 - BRAZIL TODAY

Minimum Credits: 1
Maximum Credits: 1
This introductory course, offered jointly by Pitt and CMU, explores how current thematic factors interact to influence brazil's position in the world today and into the future. The 3-day, weekend course will touch upon issues including: education, industrial growth, economic development, business influence, exports and socio-economic shifts. Course requirements include attendance, brief written reflections, and a final paper.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

ENGR 1631 - INTRODUCTION TO MINING ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
The course introduces students to: 1) the history and importance of mining, 2) the exploration and development of surface and underground mines, 3) modern mining methods and operations, 4) common mining equipment, 5) fundamentals of mine ground control and ventilation, 6) elements of coal preparation and mineral processing plants, and 7) mine health and safety management. It is designed to provide students with basic understanding of the primary elements of a mining operation and the engineering issues associated with operating a mine in a safe, effective, and sustainable manner. The mining industry is replete with technical jargon and specialized processes and machinery that require mastery by students prior to exploration of more technically complex engineering coursework. Introductory lectures and field trips help to prepare students for the rigors of studying the other mining engineering courses offered within the Swanson School of Engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: (PROG: Swanson School of Engineering) or (PLAN: Geology (BS or BPH))

ENGR 1632 - SUSTAINABLE DEVELOPMENT AND THE MINERAL INDUSTRY

Minimum Credits: 3
Maximum Credits: 3
The course begins by examining the needs of society and commercial entities engaged in mineral production. Well conceived and designed mineral or solid fuel projects exercise a balance between economic prosperity, environmental health, and social equality. These concepts are then integrated into a case study, where the feasibility of a proposed mining project is analyzed. This examination forms the underpinnings of a course project report.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1633 - MINERALS INDUSTRY RISK MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Explores the concepts, models and methods used to create and support the implementation of risk management within minerals industry organizations. Models and methods include life cycle model, work process model, risk analysis methods and risk assessment methods used to implement a minerals industry risk management framework.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

ENGR 1634 - ENVIROMENTAL CONTROLS IN MINING

Minimum Credits: 3
Maximum Credits: 3
The course is designed to study the environmental impact of coal, stone, and other mining operation and examine the engineering controls used to mitigate these impacts. The examination begins with the exploration and permitting of the mine site, emphasizing important environmental issues. Next, the impacts of active mining on land and water use are outlined. Most of these issues are related to subsidence impacting surface structures and water movement both at the surface and underground. To complete the mine's life cycle, closure and remediation issues are investigated. Lastly, a detailed examination of the issues associated with abandoned mined-lands, i.e. Acid-mine drainage, mass-wasting, fires, etc., Are studied. Throughout the course, engineering controls that focus on mitigating the environmental impacts of mining are acknowledged and assessed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1635 - MINE VENTILATION ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course provides the skills needed to analyze and design ventilation systems for underground mines based on 1) regulatory requirements, 2) health concerns for workers, 3) levels of dusts and toxic or explosive gases present, 4) mining methods used, and 5) splitting and delivery of different quantities of air to various workplaces.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1637 - STRATA CONTROL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course provides the skills needed to analyze and design ground control systems for underground mines based on 1) regulatory requirements, 2) safety concerns for workers, 3) stress and displacement characteristics, 4) proposed mining methods, and 5) local geologic conditions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1638 - MINING HEALTH AND SAFETY

Minimum Credits: 3
Maximum Credits: 3
Presents an overview of the health and safety issues within the mining industry and to examine current efforts to address these issues. In-depth discussion of health issues affecting mining include: diesel control, noise induced hearing loss, silicosis, coal mine dust monitoring and control, toxic substances, and toxic fumes. In-depth discussion of safety issues affecting mining include: explosives, falls of ground, mine inundation's, fire prevention, mine explosions, ventilation, methane control, emergency response and rescue, training, ergonomics, machine safety, and electrical safety.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1700 - INTRODUCTION TO NUCLEAR ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Introduction to nuclear science and technology; applications of nuclear engineering; careers in nuclear industry; nuclear history; reactor types; elementary nuclear and reactor physics; nuclear radiation and safety; fuel cycle; regulations and sustainability.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0152 or 0175 or 0202 or 0476) and (CHEM 0102 or 0112 or 0120 or 0420 OR 0720 or 0770 or 0970); PROG: School of Engineering

ENGR 1701 - FUNDAMENTALS OF NUCLEAR REACTORS

Minimum Credits: 3
Maximum Credits: 3
Nuclear physics, fission and fusion; cross-sections; neutron flux and slowing-down; diffusion and transport; criticality condition and calculations; reactor kinetics and shielding; heat generation, transfer and cooling; reactor materials; reactor structure.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0152 or 0175 or 0202 or 0476) and (CHEM 0102 or 0112 or 0120 or 0420 or 0720 or 0770 or 0970); PROG: Undergraduate School of Engineering

ENGR 1702 - NUCLEAR PLANT TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
Current and future reactor systems; nuclear power plants; balance of plant configuration; fuel cycle management; reactor operation principles; reactor plant economics; analysis and design of nuclear systems; design projects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0152 or 0175 or 0202 or 0476) and (CHEM 0102 or 0112 or 0120 or 0420 or 0720 or 0770 or 0970); PROG: Undergraduate School of Engineering

ENGR 1704 - THE FRENCH NUCLEAR CYCLE

Minimum Credits: 3
Maximum Credits: 3
The French have the most complete implementation of the nuclear fuel cycle of any country in the world. Areva, a French public multinational industrial conglomerate, is mainly known for nuclear power. Their interests in the nuclear power field include mining, milling, conversion, enrichment, fuel fabrication, the design and construction of nuclear power plants, the service of nuclear power plants, used/spent nuclear fuel storage, the reprocessing of used/spent nuclear fuel, the fabrication and utilization of mixed oxide fuel. The French agency CEA, Commissatiat L'energie Atomique, conducts research on advanced fuel cycles, advanced applications of nuclear power, applications of radioactivity, and the long-term disposal of radioactive waste. This course will acquaint the student with the nuclear fuel cycle via the implementation of the French nuclear fuel cycle. The course will provide introductory material on the nuclear fuel cycle in the classroom at the University. Then the students will travel to France to interact with nuclear engineering academics, engineers and scientists working in the area, and tour facilities in France.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1713 - RADIATION DETECTION AND MEASUREMENT

Minimum Credits: 3
Maximum Credits: 3
This combined lecture and laboratory course will proved students with an introduction to the principles of radiation detection and measurement and experimental techniques. The lecture material will provide students with an understanding of the theoretical bases of detector operation, radiation interactions with matter, signal conditioning and processing electronics, measurement techniques, and statistical considerations. Laboratory work will emphasize the practical aspects of radiation detection using an array of radioactive sources, detectors, and associated signal processing electronics. Through a series of laboratory experiments, students will learn to configure and operate instrumentation used in a wide range of radiation detection applications that are of interest to nuclear power, nuclear medicine, radiochemistry, and other scientific disciplines.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1716 - THE ART OF MAKING: AN INTRODUCTION TO HANDS-ON SYSTEM DESIGN AND ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Engineering is fundamentally a creative process in which ideas are generated and transformed into new systems and devices in the world to meet human needs. The term engineer shares its origins with ingenious: one definition of engineer is 'a skillful inventor.' In this course, we will explore tools and techniques for inventing, designing and prototyping systems. This course is based on experiential learning: through interactive discussions, small-team exercises, maker assignments, workshops and hands-on projects, students will obtain an introduction to design thinking, 'maker culture' and systems engineering. ENGR 1716 is an upper division version of freshman honors ENGR 0716. It is for sophomore, junior and senior level students. We will explore user-centric design principles, low-resolution prototyping and experience prototyping, basic building elements for systems such as sensors, computer controllers, actuators and displays, materials and methods for prototyping, and ways to analyze and troubleshoot systems. Students will gain an introduction to 'smart systems': automated systems that can sense the world and automatically respond in useful ways. We will also focus on the user interface: how to create control and display interfaces that enhance users' ability to operate systems effectively and efficiently.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1770 - ENGINEERING FOUNDATIONS OF MUSIC

Minimum Credits: 3
Maximum Credits: 3
Since Paleolithic times, engineering has been applied to the production of music, but advances in the past few centuries, including sound recording, the introductions of electronics, and a greater understanding of the physics, mathematics, and psychology of sound, have greatly expanded what a student can learn in the field of music engineering. This is a lecture course about the engineering aspects of music, including the following general topics: the physics of sound and the mathematics of harmony; the means of creation through mechanical musical instruments, including the human voice, as well as electronic instruments; recording, reproduction, and enhancement though signal processing; interaction with human perceptual, cognitive, and motor systems. Assuming knowledge of differential and integral calculus, the course will develop (or review) a basic understanding of convolution and Fourier Analysis through examples in the engineering aspects of music. Starting with an historical perspective on technology, we will extrapolate a look into the future of music engineering. Students will be able to describe engineering aspects of musical instruments, reproduction, and processing and apply the mathematical and physical basis for sound and the theory of harmony in understanding the system of interaction between human and machine that constitutes music. Topics covered include: convolution and Fourier Analysis; physics of sound; mathematics of harmony; physics of mechanical instruments; recording and reproduction of music; electronic processing of sound; electronic synthesis of music; psychophysics of music.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1869 - INTRO ELEC ENGRG FOR NON EE'S

Minimum Credits: 3
Maximum Credits: 3
Linear electric circuits, circuit elements and sources, mesh and node equations, the venin equivalent circuits, sinusoidal steady state analysis, three phase circuits, power concepts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

ENGR 1870 - SOLIDS PROCESSING AND TRANSPORT

Minimum Credits: 3
Maximum Credits: 3
Particle technology affects as much as 80% of the chemical process industry, yet is often omitted from the undergraduate curriculum of chemical engineers. This course is designed to give advanced undergraduates as well as early-term graduate students an introduction to this rich and diverse field. Topics will range from fundamentals (particle classification, properties, and flow) to applied (hopper design, mixing, etc. Industry related examples and designs with be presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1900 - INTRODUCTION TO SUSTAINABLE WATER TECHNOLOGY & DESIGN

Minimum Credits: 3
Maximum Credits: 3
In this course, students will be introduced to the complex and global interactions that make up the human-water interface and learn to design for

water applications. Beginning with the physical/chemical and biological significance of water, this course will analyze the development of water technologies within their historical, cultural and geopolitical contexts. This introduction will serve as the foundation for quantitatively evaluating: 1) the present day water challenges that face communities, cities, and nations & 2) the state-of-the-art technologies currently deployed to manage these needs. The second half of the course will be used to explore innovative examples, examine current water research and technology and work on a course project in which students will have the opportunity to create and design sustainable methods and technologies to meet local and or global water challenges.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1905 - CURRENT ISSUES IN SUSTAINABILITY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the core principles of sustainability (i.e. Social, economic, and environmental) from the perspective of several disciplines and research fields. Covering a variety of topics such as urban infrastructure, energy policy and the environment, sustainable water-use, habitat sustainability and biodiversity, the curriculum and schedule are updated annually to reflect advancements in the field of sustainable engineering and science, and to continually incorporate current topics. While the course is primarily taught by the sustainability faculty fellows it will also consist of various guest lectures by sustainability faculty and senior practitioners working throughout the Pittsburgh region. Course assignments will consist of a series of essays and assignments and culminate in a team term project. This is a required course for the undergraduate sustainability certificate and the M.S. in Sustainable Engineering.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1907 - SUSTAINABILITY CAPSTONE

Minimum Credits: 3
Maximum Credits: 3
Building upon students' previous experience and skills, this course will focus on enabling interdisciplinary student teams to synthesize comprehensive solutions to complex real-world Sustainability challenges. This is a project-based course. Project topics will be developed in consultation with instructors and sustainability stakeholders. Innovative solutions will require the application of critical thinking and collaboration to resolve. By the end of the course the students will have a deeper understanding of 1) the multi-faceted nature of Sustainability solutions 2) approaches to problem solving across fields and 3) how to communicate sustainable solutions and concepts in an interdisciplinary team environment. This course serves as a capstone course for the Sustainability certificate and M.S. in a Sustainable Engineering degree and is a required course for these two programs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Capstone Course

ENGR 1920 - ENGINEERING CRAFT BREWERY - INTERNATIONAL OPPORTUNITY

Minimum Credits: 1
Maximum Credits: 1
This course provides the opportunity to explore and learn about the Craft Brew process in Europe. You will be able to describe and analyze the entire brew process as you are traveling to local breweries, malteries and Yeast manufactures in an European city. The program abroad occurs during spring break. Students must have taken ENGR 1933 or be taking ENGR 1933 in order to qualify for this course. Students must apply and be accepted by Engineering International Programs in order to be registered.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PREQ or CREQ: ENGR 1933

ENGR 1925 - ENGINEERING SUSTAINABILITY IN ISLAND NATIONS

Minimum Credits: 3
Maximum Credits: 3
Studying abroad in island nations provides a great learning opportunity to examine the complexity of sustainability because the scale of processes are more easily traced and the network of connections more readily tracked. In this course, students will explore the challenges/opportunities for sustainability in Jamaica with a broad consideration of industry, socio-economics, environmental impacts, history, contemporary culture and demographics. Through hands-on projects, immersions with local organizations, academic tours in country and, a collaborative research project with the University of West Indies, the students learn to frame contemporary engineering sustainability issues for island nations in societal and global

contexts and, demonstrate a mastery of these through written and oral communication. The course is presented in preparation for the extended trip to Jamaica, ensuring that students have the requisite preparation to identify and discuss engineering, development and sustainability issues during site-visits in Jamaica. Each session, guest speakers will address topics intended to provide the necessary background for the trip. The presentations will serve as the basis for comparative discussion and analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 1925IS - ENGINEERING SUSTAINABILITY IN ISLAND NATIONS - IS

Minimum Credits: 0
Maximum Credits: 0
Studying abroad in island nations provides a great learning opportunity to examine the complexity of sustainability because the scale of processes are more easily traced and the network of connections more readily tracked. In this course, students will explore the challenges/opportunities for sustainability in Jamaica with a broad consideration of industry, socio-economics, environmental impacts, history, contemporary culture and demographics. Through hands-on projects, immersions with local organizations, academic tours in country and, a collaborative research project with the University of West Indies, the students learn to frame contemporary engineering sustainability issues for island nations in societal and global contexts and, demonstrate a mastery of these through written and oral communication. The course is presented in preparation for the extended trip to Jamaica, ensuring that students have the requisite preparation to identify and discuss engineering, development and sustainability issues during site-visits in Jamaica. Each session, guest speakers will address topics intended to provide the necessary background for the trip. The presentations will serve as the basis for comparative discussion and analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Attributes: Pitt Class

ENGR 1925OS - ENGINEERING SUSTAINABILITY IN ISLAND NATIONS -OS

Minimum Credits: 0
Maximum Credits: 0
Studying abroad in island nations provides a great learning opportunity to examine the complexity of sustainability because the scale of processes are more easily traced and the network of connections more readily tracked. In this course, students will explore the challenges/opportunities for sustainability in Jamaica with a broad consideration of industry, socio-economics, environmental impacts, history, contemporary culture and demographics. Through hands-on projects, immersions with local organizations, academic tours in country and, a collaborative research project with the University of West Indies, the students learn to frame contemporary engineering sustainability issues for island nations in societal and global contexts and, demonstrate a mastery of these through written and oral communication. The course is presented in preparation for the extended trip to Jamaica, ensuring that students have the requisite preparation to identify and discuss engineering, development and sustainability issues during site-visits in Jamaica. Each session, guest speakers will address topics intended to provide the necessary background for the trip. The presentations will serve as the basis for comparative discussion and analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Attributes: Pitt Class

ENGR 1933 - ENGINEERING A CRAFT BREWERY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the science of brewing and the engineering required to design and operate a craft brewery. Students will apply concepts from mass and energy balances, fluid dynamics and heat transfer, and reaction engineering to study the unit operations required to convert grain, water, yeast, and hops into beer. Students will also develop product analysis and product design skills to justify brewing choices based upon brewing science, engineering, and economic considerations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGR 2210 - UNDST BRAZIL-PREP RES & STUDY

Minimum Credits: 2
Maximum Credits: 2
This seminar is specifically designed for students who will be doing research and/or studying in Brazil. It introduces the economic, political, social, and cultural aspects of Latin America in general and brazil in particular. The seminar is organized and conducted by the center for Latin American studies, and features guest lectures from on brazil, readings from current popular literature and news sources (available from the Eduardo Lozano

Latin American collection, a library resource of over 340,000 volumes spanning 30 years), and contemporary films (such as decade of destruction: killing for land and Brazilian populations: stories and myths). The first half of the course will introduce students to day-to-day life in brazil, as well as its current socio-economic situation, the influence of politics and ethnic relations, and the many aspects of Brazilian culture. The second half will focus on disciplinary perspectives that allow students to explore regional issues from a variety of viewpoints. The final seminars in the semester will be used for the presentation of individual student reports on a topic related to Brazilian life, such as the governmental structure, university system, or integration of technology with indigenous lifestyles and traditions. This course is required for all Igert fellows.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: Rich Text Editor, field_84_161578, Press ALT 0 for help
PROG: Swanson School of Engineering

Engineering Science

ENGSCI 1085 - ENGINEERING SCIENCE SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Seminars are designed to acquaint the student with aspects of engineering not normally encountered in classes and include a wide range of topics such as the significance of engineering as a profession and the relation of engineering to current social problems.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Engineering Science (BSE)

ENGSCI 1801 - ENGINEERING DESIGN 1

Minimum Credits: 3
Maximum Credits: 3
A major project involving literature search, planning, experimentation, analysis, an oral presentation and a final technical report. The project may be sponsored by the engineering physics program, one of its participating departments, or a local company. The project is conducted under the direction of a faculty advisor(s).
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering; PREQ: MEMS 1043 or ECE 1896

ENGSCI 1802 - ENGINEERING DESIGN 2

Minimum Credits: 3
Maximum Credits: 3
The continuation of ENGRPH1801, engineering design 1.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering; PREQ: ENGSCI 1801 and (MEMS 1043 or ECE 1896)

English Composition

ENGCMP 0150 - WORKSHOP IN COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to give students who have had limited experience with writing an opportunity to increase their control of written language and their confidence in performing academic inquiry, analysis and argument. Students write in response to weekly assignments, and instruction focuses on helping students to extend, revise, and edit their work.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: Enrollment restricted to students with a SAT English Verbal high score less than 560 or an ACT score of 24.
Course Attributes: DSAS Workshop in Comp. General Ed. Requirement

ENGCMP 0151 - WORKSHOP TUTORIAL

Minimum Credits: 2
Maximum Credits: 2
This course provides support for students who are taking ENGCMP 0150 workshop in composition. Students meet weekly with a writing center consultant to work on understanding and addressing writing assignments. Students can also expect to learn how to strengthen their writing at the sentence- and paragraph-levels. Students work one-on-one with a consultant, using the papers they produce in ENGCMP 0150 as materials for discussion.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Satisfactory/No Credit
Course Requirements: CREQ: ENGCMP 0150 or 0152

ENGCMP 0152 - ESL: WORKSHOP IN COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to give students learning English as a foreign language an opportunity to develop their ability to write in English and their confidence in performing academic inquiry, analysis and argument. Students write in response to weekly assignments, and instruction focuses on helping students to extend, revise, and edit their work.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0007 or LING 0009
Course Attributes: DSAS Workshop in Comp. General Ed. Requirement

ENGCMP 0200 - SEMINAR IN COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This introductory course offers students opportunities to improve as writers by developing their understanding of how they and others use writing to interpret and share experience, affect behavior, and position themselves in the world. Specific reading and writing assignments may vary from section to section, but student writing will be the primary focus in all sections. The course is designed to help students become more engaged, imaginative, and disciplined composers.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0002 or 0003 or 0005 or 0010 or 0100 or 0150 or 0152 or ENG 0101; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher.
Course Attributes: DSAS Seminar in Comp. General Ed. Requirement, SCI Expression: Intro Composition General Ed. Req.

ENGCMP 0201 - COMPOSITION TUTORIAL

Minimum Credits: 1
Maximum Credits: 1
This course is a series of tutorial sessions designed to help students with their writing at the sentence and paragraph levels. Students work one-on-one with a consultant in the writing center, using the papers they produce in ENGCMP 0200 as materials for discussion.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit
Course Requirements: CREQ: (ENGCMP 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or (FP 0003 or 0006)
Course Attributes: DSAS Workshop in Comp. General Ed. Requirement

ENGCMP 0203 - SEMINAR IN COMPOSITION: GENDER STUDIES

Minimum Credits: 3
Maximum Credits: 3
Like other seminars in composition, this introductory course offers students opportunities to improve as writers by developing their understanding of how they and others use writing to interpret and share experience, affect behavior, and position themselves in the world. This particular seminar will include readings and writing activities that comment on gender difference and consider the ways in which language and culture construct socially acceptable gender and sexual norms.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0002 or 0003 or 0005 or 0010 or 0100 or 0150 or 0152 or ENG 0101; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Seminar in Comp. General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Expression: Intro Composition General Ed. Req.

ENGCMP 0205 - SEMINAR IN COMPOSITION: FILM

Minimum Credits: 3
Maximum Credits: 3
Like other seminars in composition, this introductory course offers students opportunities to improve as writers by developing their understanding of how they and others use writing to interpret and share experience, affect behavior, and position themselves in the world. This particular seminar will include a series of films, along with discussions that focus on how films and other media shape the ways we view and understand the world.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0002 or 0003 or 0005 or 0010 or 0100 or 0150 or 0152 or ENG 0101; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher
Course Attributes: DSAS Seminar in Comp. General Ed. Requirement, Film Studies, SCI Expression: Intro Composition General Ed. Req.

ENGCMP 0207 - SEMINAR IN COMPOSITION: EDUCATION

Minimum Credits: 3
Maximum Credits: 3
Like other seminars in composition, this introductory course offers students opportunities to improve as writers by developing their understanding of how they and others use writing to interpret and share experience, affect behavior, and position themselves in the world. This particular seminar will include readings that consider issues of teaching and learning in American education and may be of interest to those who plan to become teachers.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0002 or 0003 or 0005 or 0010 or 0100 or 0150 or 0152 or ENG 0101; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher

ENGCMP 0208 - SEMINAR IN COMPOSITION: SERVICE-LEARNING

Minimum Credits: 3
Maximum Credits: 3
Students will engage in service-learning, pairing meaningful service in the community with academic work. Discussions will focus on students' experiences and their reflections as guided by critical readings and short essay assignments. Essays will comprise the central course texts, and weekly work will include reading and discussing the essays that students produce for this course.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0002 or 0003 or 0005 or 0010 or 0100 or 0150 or 0152 or ENG 0101; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher

ENGCMP 0210 - SEMINAR IN COMPOSITION: ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Seminar in Composition is a course taken by almost all undergraduates at the University of Pittsburgh. Seminar in Composition: Engineering undertakes the goals of Seminar in Composition within a first-year (and beyond) engineering context. First-year Swanson School of Engineering (SSOE) students in Seminar in Composition: Engineering will explore engineering disciplines, practices, methods, ethics, and education and will analyze their own views and goals as engineering students and as future engineers as they are learning about and practicing writing as a rigorous, disciplined form of critical inquiry and a responsible form of communication. In Seminar in Composition: Engineering, students will strengthen their knowledge and practice of the textual conventions required of university- and professional-level writing and will, via drafting and revision, regularly reexamine the clarity and effects of their writing processes and outcomes. Writing instruction will take place in the ENGR 0011 or 0711 classroom, so students won't have a separate class meeting for ENGCMP 0210; be sure that your ENGR and ENGCMP courses meet at the same day and time in the same classroom.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: ENGR 0011 or 0711; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher

ENGCMP 0212 - SEMINAR IN COMPOSITION: TOPICS IN DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
Seminar in Composition is a course taken by almost all undergraduates at the University of Pittsburgh. Its goals are to help you engage in writing as a creative, disciplined form of critical inquiry; compose thoughtfully crafted essays that position your ideas among other views; write with precision, nuance, and awareness of textual conventions; and revise your writing by rethinking the assumptions, aims, and effects of prior drafts. This seminar will include readings and writing activities that explore concepts and practices relating to diversity and its established and emerging definitions. Your section may address, for example, issues like race, gender, sexuality, ethnicity, religious difference, differences in abilities, and economic disparities. You can expect to identify and analyze assumptions about difference, study how texts can generate and perpetuate such assumptions, and explore the consequences of such assumptions. You will also learn how to research and compose with attention to difference. We will read a challenging set of essays to frame our work in the course, but the key texts will be your own writings and those of your classmates. Your focus on student writing will be detailed: you will work closely with the papers that you and your fellow classmates have written, trying to think of ways to make them more precise, interesting, organized, complex, and reflexive. This course is an opportunity to learn how to use reading (published texts, the papers of your classmates, and readers' comments) to help you work on your writing and how to use writing to help you strengthen ways of reading and thinking. Like other seminars in composition, this introductory course offers students opportunities to improve as writers by developing their understanding of how they and others use writing to interpret and share experience, affect behavior, and position themselves in the world. This seminar will include readings and writing activities that explore concepts and practices relating to diversity and its established and emerging definitions. Your section may address, for example, issues like race, gender, sexuality, ethnicity, religious difference, differences in abilities, and economic disparities. You can expect to identify and analyze assumptions about difference, study how texts can generate and perpetuate such assumptions, and explore the consequences of such assumptions. You will also learn how to research and compose with attention to difference.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENGCMP 0002 or 0003 or 0005 or 0010 or 0100 or 0150 or 0152 or ENG 0101; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher

ENGCMP 0400 - WRITTEN PROFESSIONAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course explores the methods of inquiry, analysis and composition characteristic of written communication in professional settings. The course will examine such writing's specialized use of language, conventions and formats, premises, motives, and purposes. By preparing letters, resumes, proposals, reports, etc. Students will get a feel not only for what "professional" communication is, but also for how and why it does, or can, or should function.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., Writing Requirement Course

ENGCMP 0401 - WRITTEN PROFESSIONAL COMMUNICATION: TOPICS IN DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
This course explores the methods of inquiry, analysis and composition characteristic of written communication in professional settings. The course will examine such writing's specialized use of language, conventions and formats, premises, motives, and purposes. By preparing letters, resumes, proposals, reports, etc., students will get a feel not only for what "professional" communication is, but also for how and why it does, or can, or should function. This Topics in Diversity section of WPC will invite students to expand and complicate their understanding of the benefits of workplace diversity and of the problems arising from the unequal distribution of power and privilege across positions (including race, gender, sexuality, ethnicity, ability, religion, and class) in the professions. Students will explore the dynamics of power and hierarchy in their chosen field as they observe daily operations and interactions during work-site field visits, and they will consider how these dynamics perpetuate or diminish inequities and marginalization. Among the topics considered are discrimination in hiring and on the job in terms of employment training, responsibilities, pay, and promotions. Students gain practice articulating their individual diversity as job candidates in resumes and cover letters, and in composing professional documents that address a complaint, seek a remedy, and establish new policies to address hypothetical discriminatory issues that they may experience in the future.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or

ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, Writing Requirement Course

ENGCMP 0410 - WRITING IN THE LEGAL PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
This course is especially useful for students preparing for classes in the legal professions. Students will be trained to understand the nature of assumptions and assertions, to examine the pertinence of evidence, to judge the appropriateness of tone to subject matter and audience, and to test the validity of an argument through an analysis of its components.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 0412 - ENGINEERING COMMUNICATION IN A PROFESSIONAL CONTEXT

Minimum Credits: 3
Maximum Credits: 3
ENGCMP 0412 Engineering Communication in a Professional Context, is a required course for all Swanson School of Engineering first-year students enrolled in ENGR 0012. In ENGCMP 0412 students write a significant research paper for the Swanson School of Engineering's Annual Conference on Sustainability, held near the end of the spring term. Students compose this paper in teams of 3; students also compose individual papers reporting and reflecting on their experience with teamwork and with researching, composing, assessing, and presenting written work within a context of maximum personal and professional responsibility and integrity. In ENGCMP 0412 students undertake intensive research into a current engineering innovation/technology. Students expand upon that research as they move through a multi-step process of writing and revising a conference paper that includes considerable technical content as well as intensive analyses of the social value and ethical applications of that technology. Through ENGCMP 0412, students will continue to increase their experience and success with major teamwork projects, will practice best policies and procedures for professional communication and presentation, will continue to learn about and practice communication modes and expectations in engineering, science, and technology, and will continue with an academically and intellectually rigorous process (begun in ENGCMP 0210, Seminar in Composition: Engineering), of understanding and communicating what it means personally, educationally, professionally, socially, and globally to "be an engineer."
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: ENGR 0012

ENGCMP 0420 - WRITING FOR THE PUBLIC

Minimum Credits: 3
Maximum Credits: 3
This course explores the theory and practice of writing that serves the public interest, including writing for the nonprofit and the governmental sectors of American society. The course will explore the ethics of writing for the public, the impact of rhetorical contexts on writing, and the ways in which writing and revision can allow us to understand a problem or issue in a new way. Students can expect to read examples of writing for the public, conduct significant research, and write in different genres.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718) or ENGR 0716
Course Attributes: Writing Requirement Course

ENGCMP 0425 - DIGITAL HUMANITY

Minimum Credits: 3
Maximum Credits: 3
This course prepares students to critically examine the intersections between digital devices and human life. Covering topics such as the relationship between computers and humans, surveillance, big data, and interactivity and games, we question what it means to be human in a space of pervasive digitality.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

ENGCMP 0430 - PUBLIC COMMUNICATION OF SCIENCE AND TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course explores the theory and practice of writing that serves the public interest. We will focus on writing about science, technology, and the environment areas that influence our daily lives in innumerable ways. By composing in a variety of genres, students will gain a deeper understanding of the ethics of writing about science and technology for public audiences, the interaction of communication and rhetorical context, and how writing and revision can facilitate new ways of thinking. Students will study academic articles, professional examples, news coverage, and student work.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)

ENGCMP 0432 - WRITING FOR ENVIRONMENTAL ADVOCACY

Minimum Credits: 3
Maximum Credits: 3
This course focuses on writing in response to the natural environment, primarily as a tool to raise awareness of environmental challenges and to advocate for ways to meet those challenges. We¿ll read a variety of voices and styles of advocacy writing, always with a strong focus on the craft of language: How does the writing reach its target and accomplish its goal? What makes the writing persuasive? We will also study public documents that explore issues related to environmental advocacy. Through varied assignments including blog posts, op-eds, and a researched project for a specific audience, you'll increase familiarity with approaches to and niches for environmental writing, and with some of the historical and political context of the environmental movement. We will investigate the concept of environmental justice and learn more about who feels the biggest impacts of pollution and environmental degradation, and what this means for conversations about change. You¿ll hear from at least one guest speaker who will talk about writing for a local environmental organization. We will also likely take a field trip off campus. You'll devote the second half of the semester to an individual writing project and presentation focusing on a specific environmental challenge of your choice.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)

ENGCMP 0440 - CRITICAL WRITING

Minimum Credits: 3
Maximum Credits: 3
Students in this course will be trained in the responsible development and articulation of written opinions. Material drawn from various media will be used to help students increase their powers of observation and analysis that they may learn the art of making discriminating evaluations of situations, events, issues, controversies, artifacts and objects.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 0450 - RESEARCH WRITING

Minimum Credits: 3
Maximum Credits: 3
This course trains students in the techniques of responsible library research. Students will learn how to locate and utilize the resources of a library. Students will also learn how to take notes and document, use primary and secondary sources, and write paraphrases, summaries and abstracts. Each student will write a major research paper on a topic of his/her choice, one which may legitimately serve as a term paper for another course.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., Writing Requirement Course

ENGCMP 0500 - TOPICS IN COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
These courses are offered as alternatives to meet the general writing requirement. Each section will use a specific theme or problem to develop students' facility with the sorts of inquiry and discursive practices that characterize academic work. Topics courses require regular reading, at lEast 35 pages of writing, and regular revision.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 0510 - NARRATIVES OF THE WORKPLACE

Minimum Credits: 3
Maximum Credits: 3
Narratives of the workplace builds on the work of general writing and 400 level course offerings such as written professional communication, writing in the legal professions, and writing for the public by providing students with the opportunity to diversify their writing skills through critically examining workplace narratives and creating an archived presentation based upon workplace experiences or histories.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 0515 - PERSAUSIVE WRITING IN ADVERTISING

Minimum Credits: 3
Maximum Credits: 3
In this course, students will analyze and create the kinds of persuasive writing used in the fields of fundraising and advertising. Both types of writing attempt to influence the decisions people make about the money they spend, the attitudes they have, and the issues that shape our society.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 0520 - INTEGRATING WRITING AND DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course allows students to explore the rhetorical implications of design and invites students to consider design and writing as an integral process. The class will alternate lecture/discussion sessions with studio sessions, so that students can learn how to use Adobe InDesign to create both single- and multi-paged documents for particular rhetorical contexts. Student will create a number of designed pieces of writing, including a longer multi-page document for a specific audience.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

ENGCMP 0521 - WRITING WITH DATA

Minimum Credits: 3
Maximum Credits: 3
This course is designed to allow students to engage with data in their writing and learn how to effectively write with numbers. This course is for

anyone: those who love to write but are sometimes less confident working with numbers, those who love numbers but want to improve their writing, for people who love numbers and writing rather equally, for scientists, for artists, for people who anticipate working with a lot of data in their career, etc. Students will work with a dataset of their choosing and develop several pieces reliant on quantification for both lay and specialized audiences. Through these writing projects and through classroom activities, students will learn about how to find data to use for their writing, how to plan effective utilization of this data in a broader argument, how to responsibly and effectively use word choice and syntax to convey quantified material, how to organize writing reliant on data for both lay and specialized audiences, and how to incorporate data visualization for purposes of understanding and persuasion. There is no need to know anything about statistics; throughout the term we will learn how mathematical encounters with writing can be engaging, exciting, and something we can work on together. We will be going over a handful of statistical concepts in the second half of the course so we can write about them, but the emphasis here will ultimately be on proficiency for the purposes of a given concepts use in writing. By the end of the course, both traditional and quantitative literacy will be improved to serve student development as competent quantitative writers and readers in future PPW courses, courses across different majors at Pitt, in their writing as professionals, and as more discerning consumers and producers of knowledge as global citizens.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 0530 - WRITING FOR THE SCIENCES

Minimum Credits: 3
Maximum Credits: 3
This course invites students to explore the purposes and conventions of writing within the sciences. Students will read and analyze examples of professional scientific documents' including abstracts, literature reviews, research proposals, graduate school papers, journal articles, and correspondence. They will learn to craft scientific research into engaging written material, using information drawn from publicly available studies or their own research. They will consider their audience's needs and tailor their writing for both expert and general readers in different rhetorical contexts. Students will also learn strategies for document design, including how to effectively use visuals to represent data and findings. Throughout the course, students will learn how to write clear, powerful sentences and paragraphs. Finally, to develop their professional collaboration skills, students will practice providing each other with effective feedback on works-in-progress.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 0535 - WRITING IN THE HEALTH SCIENCE PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
This course is designed for students who are interested in learning about the kinds of writing typically done by clinicians, researchers, and others working in health science contexts. The course focuses on developing the skills needed to write and communicate effectively in health and medical contexts, from writing essays for graduate and professional program applications and documenting research to communicating with patients and staff, writing professional reports and correspondence, and giving conference presentations. Students will gain familiarity with the formal requirements of biomedical abstracts, literature reviews, and research papers, and they will learn effective strategies for conducting secondary research using health science databases and search engines. The course will also introduce techniques for improving documents, structure and style, so that readers can easily grasp, follow, and absorb the significance of the information presented. Students will be introduced to expectations and challenges they are likely to encounter in other common writing scenarios, such as explaining complex information to patients, writing reports for administrators or regulatory agencies, and communication policies or procedures to staff. Different approaches to writing graduate and professional school personal statements will be discussed, and students will draft and revise either personal statements for applications or mission statements articulating their professional visions within a larger ethical framework. Through the course of the term students will work towards completion of a final paper on a medical communication issue, and they will present their findings in a conference-style format, at the end of the semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 0550 - TOPICS IN PUBLIC/PROFESSIONAL WRITING

Minimum Credits: 3
Maximum Credits: 3

This topics course is intended for students beginning the public and professional writing certificate, and as a writing-intensive course for students fulfilling general education requirements or interested in writing as a subject as well as a mode of instruction. The course will focus on varied topics, addressing different forms and environments for public and professional writing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 0560 - WRITING ARGUMENTS

Minimum Credits: 3
Maximum Credits: 3
This course has two goals: to help students become more adept at understanding and critically analyzing arguments, and to help students become better arguers themselves. Students in "Writing Arguments" will practice composing arguments across a variety of forms, genres, and technologies (written, visual, oral, digital) in order to develop and hone their persuasive language skills. As part of this practice, students will have the opportunity to design and participate in written and oral debates on topics of present interest and to compose their own examples of public persuasive communication. Writing Arguments would be especially appropriate for students headed to law or graduate school.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 0565 - WRITING PLACES

Minimum Credits: 3
Maximum Credits: 3
A. Can place make meaning? What roles do spaces, ecologies, or geographies play in shaping how we experience people, rooms, buildings, communities, regions, or the world? How do others, based on our placings, see us within these multiple frames? Writing Places introduces participants to cultural and rhetorical exchanges with places, and to constructions of place and community by thinking and moving through them. We'll consider what it means to construct, to be responsible for, to be culturally aware of, and to live place in local ecologies and/or digital/virtual environments. Unpacking current social in/justice issues and the communities they affect, participants may explore issues of racism, environmental and otherwise, land-based social in/justice, environmental sustainability, disability in/justice, im/migration, community-based activisms, and more. Through this process, we may be challenged to reorient our place/identity/orientation through various genres of writing places.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)

ENGCMP 0570 - TOPICS IN BLACK RHETORIC AND PUBLIC WRITING

Minimum Credits: 3
Maximum Credits: 3
This course will focus on varied topics as developed by the instructor. The course will explore both rhetorical theory and rhetorical practice, and it will center Black experiences, criticism, rhetoric, and public writing. Students can expect to study different critical approaches to Black rhetoric.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, Writing Requirement Course

ENGCMP 0600 - INTRODUCTION TO TECHNICAL WRITING

Minimum Credits: 3
Maximum Credits: 3
This introductory course is for students in various technical fields. Representative technical reports will be studied, as well as abstracts, the presentation of visuals and oral communication. Writing assignments will emerge from case studies reflecting on-the-job challenges.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., Writing Requirement Course

ENGCMP 0610 - COMPOSING DIGITAL MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course requires students to compose digital media while exploring the rhetorical, poetic, and political implications of multiple writing platforms. Students will learn how to compose a range of critical media objects using web-authoring languages, text, sound, images, and video in proprietary and open-source software. Classes will focus on theories of writing, composing, design, critique, delivery, and networked distributions; critique and analysis of digital media produced by professional and amateur digital media practitioners; and analysis and revisions of digital media composed by the students themselves.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGCMP 0620 - THEORIES OF WRITING AND TEACHING

Minimum Credits: 3
Maximum Credits: 3
This course explores theoretical and practical questions regarding how we understand the practice of writing and how we teach it. Thus the goal of the course will be for students to engage various debates regarding literacy theories and experiment with different approaches to literacy instruction. The work of the class will be analytical, inventive, and experimental, as students will have the opportunity not only to study literacy theories and pedagogues but also to create imaginative responses to these theories by considering how teachers might translate theoretical understandings about literacy into classroom practice.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 0641 - WRITING FOR CHANGE

Minimum Credits: 3
Maximum Credits: 3
This course is an opportunity for students to examine and produce writing that engages in advocacy, solidarity, social critique, and/or social justice. Students will explore theories of persuasive writing for public audiences, as well as argumentative strategies more broadly. Students will define the subject of a core project for the term, and move beyond understanding an issue to understanding various discourse communities that generate writing on that topic, how those organizations represent themselves, and how they define an audience. Our theoretical discussion will be balanced by a more pragmatic look at the language of social change, and how various writing forms¿produced by nonprofits, activist groups, international organizations and coalitions, as well as socially engaged journalism¿inform, persuade, and engage the public. Students in Writing for Change can expect to compose traditional essays as well as public writing in print, digital, visual, and a variety of other forms of persuasive communication.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 0712 - CRITICAL MAKING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGCMP 1099 - THE LANGUAGE OF POLICY AND POWER: TOPICS IN DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
This course invites students to deepen and expand their understanding of public policy writing and to build the skills necessary to address the unequal distribution of power and privilege influencing policy in the public sphere. The course provides students with the opportunity to develop a portfolio of practical and analytical policy-related writing by grounding our work in current discussions about diversity (including race, gender, LGBT+, ethnicity, ability, religion, and class). In this writing-intensive class, students will write a variety of documents, such as a history memo, a set of responses to the readings, a letter of public comment, an op-ed, a polemical essay, and a final policy memo, related to a specific and properly-scaled diversity policy issue. The course will address the specialized use of language, conventions and formats, premises, motives, and purposes related to policy documents and arguments in light of diversity. By preparing both reflective academic and professional policy documents, students will master not only the basics of policy writing, but, through their own research and writing, the rhetorical and critical thinking skills necessary to create effective policy. Students will learn to employ methods of inquiry, analysis, and composition characteristic of written and oral policy discussions as they relate to diversity questions, concerns, and legal requirements. We will read broadly and deeply, and engaged, informed class discussion responding to reading and current policy questions is a cornerstone of the class. We will explore how the explicit and implicit history and applications of public and private policies have created long-standing outcomes that are often taken for granted, and address ways to change and improve those outcomes.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, Writing Requirement Course

ENGCMP 1100 - LANGUAGE OF BUSINESS AND INDUSTRY

Minimum Credits: 3
Maximum Credits: 3
This course concentrates on how professional people in business and industry communicate among themselves and with the rest of the world. We will both analyze written material from professional areas and practice forms and languages of successful communication in those areas. This course is primarily for students who plan to enter or now hold positions in business and industry.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., Writing Requirement Course

ENGCMP 1101 - LANGUAGE OF SCIENCE AND TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course analyzes the rhetorical character of scientific writing and examines the role of writing and the use of language in the scientific process. The course permits students to assess professionally prepared texts as well as texts produced by other students, to write and re-write their own text and to develop a critical awareness of the resources of language employed in science and technology.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., Writing Requirement Course

ENGCMP 1102 - LANGUAGE OF MEDICINE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or

ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 1103 - PUBLIC RELATIONS WRITING

Minimum Credits: 3
Maximum Credits: 3
This course studies the ways an organization communicates with its public through news releases, speeches, brochures, feature stories, annual reports, etc. The course examines the stylistic choices each writer makes and develops a critical language to describe how meaning is created through the way information is arranged. Issues of the media, ethics, propaganda and the uses of ambiguity will also be addressed.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

ENGCMP 1104 - CORPORATE STORYTELLING

Minimum Credits: 3
Maximum Credits: 3
Corporate writers play key roles in defining and developing the communications landscape for organizations and their audiences. But what exactly is corporate writing? How do we, as writers, ensure we are effectively advancing the goals of our companies and clients? In this course, students will explore the conventions of content marketing, search engine optimization, writing for the web, and the other forms of business writing in order to craft inventive and accessible messages. We will also examine corporate storytelling as a tool used to construct and maintain strong company personas. Assignments will incorporate written, visual, and oral components as students launch their own companies to simulate real world projects and dynamics. This course will help you strengthen and flex your creative communication skills to engage and influence readers in a variety of channels within the corporate setting.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 1111 - PROFESSIONAL WRITING IN GLOBAL CONTEXTS

Minimum Credits: 3
Maximum Credits: 3
In order to create effective and powerful documents for diverse global audiences, students need to be able to negotiate the expectations, assumptions, conventions, and professional practices of different cultures. This course will help advanced undergraduate students better understand what is at stake in writing for international audiences, how to research issues relating to communication (and especially the use of English) in global contexts, and how to write professional publications for particular international audiences.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or ENGR 0012
Course Attributes: SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., Writing Requirement Course

ENGCMP 1112 - PROFESSIONAL USES OF SOCIAL MEDIA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGCMP 1120 - HISTORY AND ETHICS OF ADVERTISING AND PUBLIC RELATIONS

Minimum Credits: 3
Maximum Credits: 3
As philosopher George Santayana once said, Those who cannot remember the past are condemned to repeat it. But how do history and ethics intersect to inform our decisions as writers? How do we serve the roles of advertiser and PR specialist simultaneously? What do the answers of these questions look like in the context of a real-world campaign? In this course, students will learn how pivotal ethical moments in advertising and PR history changed the face of these professions and influence our creative choices even now. Students will use the four-step planning process of research, strategy, implementation, and evaluation to construct innovative campaigns and tackle common ethical issues these professions face today. Topics to be explored may include manipulation and misrepresentation of facts, privacy concerns in the technology age, sensitivity to diversity and appropriation, responsible interaction with vulnerable populations, subliminal messaging tactics, and more. By the end of this course, students will produce a multi-faceted PR and advertising campaign that navigates a complex ethical issue and showcases their professional writing skills.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or ENGR 0012.
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Writing Requirement Course

ENGCMP 1130 - PROJECTS IN DIGITAL COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This course builds upon Composing Digital Media (ENGCMP 0610) by requiring students to compose original projects in a particular focal area digital media while exploring the rhetorical, poetic, and political implications of that focal area. Where students in Composing Digital Media typically learn how to compose a range of critical media objects using web-authoring languages, text, sound, images, and video, Projects in Digital Composition will give students the opportunity to focus closely on a particular theme or category of multimodal composition. As with Composing Digital Media, theories of writing, composing, design, critique, delivery, remediation, and revision are central to the coursework. The course also emphasizes the importance of self-guided skills acquisition.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Creative Work General Ed. Requirement, Writing Requirement Course

ENGCMP 1151 - PROFESSIONAL EDITING IN CONTEXT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 1200 - ADVANCED TOPICS IN COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
Each course will use a specific thematic or methodological focus to enact, reflect on, and criticize a specialized mode of academic or professional discourse. Topics courses require regular reading, writing, and revision.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN

Minimum Credits: 3
Maximum Credits: 3
How are computational artifacts currently designed, and how can they be designed differently? What stories can be told by collaborating with computers? What stories can't be told? This project-based course will enable students to engage with and create computational narratives and interactive projects with data, hardware and algorithms. Each collaboratively taught iteration of the course will include 3-4 of these units, such as: fabrication, interactive hardware, computational narrative, interactive data, and prototyping. Students will consider what it means to compose with computers for human audiences, and with humans for computer audiences. Designed for Digital Narrative and Interactive Design (DNID) majors to take midway through the major, it will help students consolidate the interdisciplinary knowledge they have obtained in their prerequisite courses, introduce them to examples of interdisciplinary work that will inform their later capstone projects, and give them practice in working on collaborative projects that span the humanities and information/computing fields.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0425, OR HAA 0425, OR ENGLIT 0512 AND CS 0010, OR CS 0011, OR CS 0012, OR INFSCI 0419

ENGCMP 1210 - TUTORING PEER WRITERS

Minimum Credits: 3
Maximum Credits: 3
This course prepares students to be effective tutors for peer writers by introducing them to issues and scholarship in teaching, writing and working as a tutor. Students from any discipline who are interested in careers in teaching, or students who recognize the importance and difficulty of responding well to drafts written by others will find this course of interest. The course is a prerequisite for those students wishing to work as peer interns in the writing center.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 1220 - THE ART OF THE ESSAY

Minimum Credits: 3
Maximum Credits: 3
This course offers students who have fulfilled the introductory composition requirement an opportunity to develop more advanced strategies as writers and a deeper understanding of how "effective" writing gets defined in various contexts. As they work on their own writing, students will read and discuss work by writers whose prose has received acclaim. Weekly writing assignments and exercises will provide the occasion to explore different styles and approaches to an audience.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 1250 - ADVANCED TOPICS PUBLIC/PROFESSIONAL WRITING

Minimum Credits: 3
Maximum Credits: 3
This advanced topics course is intended for juniors and seniors pursuing the public and professional writing certificate, as well as students interested in advanced writing. The course will be offered with focus on varied topics, addressing theoretical, social, or historical issues of writing in public and professional environments.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Writing Requirement Course

ENGCMP 1270 - PROJECTS IN BLACK RHETORIC

Minimum Credits: 3
Maximum Credits: 3

This topics course offers a different focus each time it is offered. The course centers Black writing, experiences, rhetoric, and criticism. Designed for students with some writing experience, this course will allow you to hone your writing ability and create a compelling project that demonstrates your critical and analytical work with example texts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, Writing Requirement Course

ENGCMP 1400 - GRANT WRITING

Minimum Credits: 3
Maximum Credits: 3
This course allows students to study the practices related to proposing change, requesting funds, and defining projects.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: SCI Expression: Tech/Bus/Res writing Gen. Ed. Req., Writing Requirement Course

ENGCMP 1401 - WRITING FOR FUNDRAISING AND DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This class focuses on Writing for Fundraising and Development. "Development" is the work of cultivating relationships between an organization and its community of supporters in order to sustain the organization and advance its work. All nonprofits do development work; large nonprofits likely have an entire development team. Those who work in development may run major campaigns, communicate with donors, write for social media, organize events, solicit corporate giving and corporate sponsorships, and write everything from newsletters to direct mail pieces to thank you letters to reports. This class focuses on the writing that supports development work and teaches you the landscape of development work today. We will study real-world examples from both local and national nonprofits. You can expect to identify an organization to write for this term and to create a series of documents (in various forms) that will constitute your development portfolio by the end of the term. Some Pitt alumni who work in or run development offices will visit class to talk about their experiences.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 1410 - ADVANCED RESEARCH/DOCUMENTARY WRITING

Minimum Credits: 3
Maximum Credits: 3
This course offers students the opportunity to study and use techniques of research that are used by writers in a range of professional settings.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 1420 - WRITING PROPOSALS FOR BUSINESS

Minimum Credits: 3
Maximum Credits: 3
Successful business proposals have great potential; they can jumpstart businesses, build a strong client base, create change in the workplace, foster professional relationships, and facilitate projects that meet the needs of specific audiences. But what is a business proposal? How does it differ from a grant proposal or a business plan? What should a business proposal look like? How do we make our proposals stand out from the rest? This course will enable students to understand the functions and conventions of business proposals, the types of research that they require, and the processes that generate them and lead to approval. Coursework will help students develop an understanding of business proposal writing from an initial idea through final submission. Students will complete a variety of written pieces leading up to the final proposal, which may be valuable in their

employment portfolios. Upon completion of this course, students will have acquired the research and writing skills necessary to write successful proposals for real-world for-profit contexts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 1430 - USABILITY TESTING IN TECHNICAL WRITING

Minimum Credits: 3
Maximum Credits: 3
This course prepares students for the creative and technical demands of the professional and technical writing workplace, ensuring each student possess the hard skills of usability testing and the soft skills required to best communicate those results. It introduces students to design theories and principles alongside practical applications on measuring usability and user experiences for products and services. Ethical and practical questions of accessibility and disability necessarily inform our discussion and practice. This course also incorporates aspects of product consulting, providing students with an opportunity to apply their theoretical and practical understanding of usability testing to the benefit of stakeholders.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGCMP 1452 - DISCIPLINING ENVIRONMENTAL EDUCATION: USING DIGITAL STORYTELLING TO UNPACK ENVIRONMENTAL ISSUES

Minimum Credits: 1
Maximum Credits: 1
In other parts of the world, such as Finland, environmental education is infused throughout the curriculum in history, science, technology, and math. This pop-up course serves as one way to provide a platform for Pitt students to experience Finnish nature schools in their backyard. The goal of the pop-up classes will be to provide a space for developing student projects at both the undergraduate and graduate levels. This course is geared for students interested in authoring visual content and testing the productive tensions of this new media. During the pop-up classes, we will establish a student-led AR/VR authoring club, training sessions for students, and work to amplify and circulate our content across our local and global communities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGCMP 1510 - WRITING WITH STYLE

Minimum Credits: 3
Maximum Credits: 3
Designed with the writer in mind, this advanced-level, workshop-style course explores the sentence in its many forms and seeks to deepen students' understanding of grammar, syntax, punctuation, and style as opportunities for creative endeavor. Through the use of imaginative exercises, revisions, and discussion of texts written by students, poets, and essayists, we will immerse ourselves in the practice of writing compelling sentences that best express our thoughts and motives. The course involves a weekly workshop of works-in-progress and the creation of a chapter-length (20-25 pages) prose revisionary project by the end of semester.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 1551 - HISTORY AND POLITICS OF THE ENGLISH LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to both historical and present use and descriptions of the English language. Students also learn techniques for analyzing and understanding the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or

ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: DSAS Diversity General Ed. Requirement, Medieval & Renaissance Studies, West European Studies, Writing Requirement Course

ENGCMP 1552 - LANGUAGE, LITERACY, LEARNING

Minimum Credits: 3
Maximum Credits: 3
This course examines how individuals and societies acquire, develop, and make use of literacy. Students engage in questions concerning the social and personal consequences of literacy, and they explore various theories and practices of reading, writing, and schooling. The dual focus on how literacy functions in the development of individuals and societies makes this course especially appropriate for advanced students considering careers in elementary and secondary education.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Childrens Literature, Writing Requirement Course

ENGCMP 1900 - INTERNSHIP: PUBLIC/PROFESSIONAL WRITING

Minimum Credits: 3
Maximum Credits: 3
This internship is intended for juniors and seniors who are pursuing the public and professional writing certificate. The internship is designed to give students a productive, substantive writing experience where they will learn from and contribute to the sponsoring agency or project. Students will consult with an advisor to arrange for intern ships and to construct the plan of work, writing, and over sight.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

ENGCMP 1901 - UTA IN TEACHING AND TUTORING WRITING

Minimum Credits: 1
Maximum Credits: 3
This experience is intended for students who wish to engage with the theory and practice of teaching writing under the mentorship of an English department faculty member. The undergraduate teaching assistantship is designed to give students a productive, substantive experience in which they will learn from and contribute to students' learning in a classroom or in the writing center. Students will consult with a faculty mentor to arrange the undergraduate teaching assistantship and to construct the plan of work, writing, and supervision.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

ENGCMP 1902 - INDEPENDENT STUDY PUBLIC PROFESSIONAL WRITING

Minimum Credits: 1
Maximum Credits: 6
This course will allow PPW students to define special projects and a course of study to explore over the course of a term.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGCMP 1903 - SERVICE-LEARNING SEMINAR IN PUBLIC AND PROFESSIONAL WRITING

Minimum Credits: 1
Maximum Credits: 1
This course is open to students who are enrolled in public and professional writing courses. It is taken concurrently with these anchor courses as a voluntary, one-credit add-on. The service-learning seminar pairs meaningful and sustained service activities in a professional non-profit organization with investigation of professional writing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

ENGCMP 1904 - SERVICE LEARNING ADD-ON CREDIT

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

ENGCMP 1905 - INDEPENDENT STUDY SERVICE LEARNING

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGCMP 1906 - PROFESSIONAL EXPERIENCE: WRITING, EDITING, OR PR

Minimum Credits: 3
Maximum Credits: 3
This course offers an exciting opportunity for students who have taken at least a couple of PPW or Writing courses: Professional Experience at Sampsonia Way, the literary journal of City of Asylum/Pittsburgh. http://www.sampsoniaway.org The PPW program is teaming up with City of Asylum to produce the magazine. The course is for responsible students who are interested in writing for this journal or running social media to promote the journal. The team will work with a teacher who will serve as managing editor and also faculty member in charge of the project. The group will learn about writing, editing, and PR while producing the online literary magazine. You can also expect to learn more about free speech and social justice while working with writers who are under threat in their home countries. Weekly meetings on campus will focus on learning about the context for the work, learning good practices for professional writing, editing, and PR, reading work by writers in exile, and workshopping your articles for publication. Interviews for articles will be in-person or via Skype. Expect to spend 10-12 hours a week working on this project. You will also need to attend class. A monthly meeting will be held at City of Asylum on the Northside (easily accessible by bus).
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGCMP 1910 - BRIDGE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Requirement Course

English Film Studies

ENGFLM 0355 - VISUAL LITERACY

Minimum Credits: 3
Maximum Credits: 3
This is an online course. Visual literacy is an emerging area of study which deals with the growing importance of visual culture in our contemporary world and how we interpret what is seen. This course will emphasize the process of critically viewing specific media artifacts and provide tools to students that will allow them to comprehend and evaluate information presented by a variety of forms of visual media, including television, video, film, photography, and the internet. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0400 - INTRODUCTION TO FILM

Minimum Credits: 3
Maximum Credits: 3
This is a basic course on the visual arts that offers the student abroad introduction to the medium of film. As part of this overview, the class will consider such issues as: the process of contemporary film production and distribution; the nature of basic film forms; selected approaches to film criticism; comparisons between film and the other media.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0401 - INTRODUCTION TO VISUAL CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course develops skills to interpret visual culture in contemporary life. Using a wide variety of media, including film, television, advertisements, fashion magazines, museum exhibits, comic books, painting, graffiti, video games, the web, and photography, the course focuses on understanding how conceptions of visuality, gender, race, and politics shape definitions of high and low culture as well as questions of knowledge and being. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0520 - FILM THEORY

Minimum Credits: 3
Maximum Credits: 3
This course is designed as a survey of film theory as a historical practice. Film Theory gives students both a firm grasp on the major topics of film theory from its origins to new media, and an understanding of how those theories developed in relation to their historical contexts. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0004 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 250 or FP 0003 or 0006 or ENG 0102 or ENGR 0012 or 0712 or 0715 or 0718
Course Attributes: Film Studies

ENGFLM 0530 - FILM ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the art of the cinema, and to the techniques for its formal and iconographic analysis. It examines the nature of shot composition and visual framing, the use of color, the role of lighting as a pictorial element, the potentials of camera movement, the modes of editing and the nature of image/sound montage. It also introduces students to dominant cinema forms--narrative, experimental, documentary, etc.--And connects the cinema to visual arts (like painting and sculpture).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0532 - INTRODUCTION TO FILM GENRES

Minimum Credits: 3
Maximum Credits: 3
This course surveys major film genres, which may include Westerns, musicals, horror, film noir, screwball comedy, etc. We will trace the history of film genres from the studio era to the present, including European transformations. The course seeks to relate film genres to the culture that created them. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Film Studies, Writing Requirement Course

ENGFLM 0540 - WORLD FILM HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course both introduces students to techniques of film analysis and acquaints them with major works and movements in international cinema. The course pays particular attention to the evolution of film narrative and visual style through landmarks in film development--European avant-garde films, British documentary, Italian neo-realism, etc. This is a Critical Studies course and is a required course for the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, Film Studies, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ENGFLM 0570 - INTRODUCTION TO NEW MEDIA

Minimum Credits: 3
Maximum Credits: 3
In this course we will look at how new media -- ranging from television, computers, digital image production, video games, to social media platforms and smart phones -- have begun to supplant the social and cultural prominence of film and other traditional media. We'll look at how these media work: at the history and theory of their development, at the changes they have brought about in a broader media culture, and at their social status and significance (e.g., The place they occupy in culture, the kinds of interactions they make possible). This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0585 - TECHNOLOGIES OF THE BODY

Minimum Credits: 3
Maximum Credits: 3
This course considers how we learn new technologies by looking at the treatment of the body in cinema and television, as well as animation, sports, gaming, and VR. In addition to analyzing media examples, students will experiment with low-tech and high-tech adaptations of optical toys and smart phone cinema to explore how movement and the body have been imagined in science and entertainment. This is a Critical Studies course with Production elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0590 - FILMMAKING: PRODUCTION AND CRITICISM

Minimum Credits: 3
Maximum Credits: 3
This course introduces filmmaking practices as related to cinematic expression, aesthetics, criticism, and ethics. Working in groups, students will produce short film projects. All aspects of production are viewed as a creative extension and continuation of the film writing, directing, and producing process. Through lectures and a range of readings, the class will explore craft, aesthetic, production and storytelling issues. This is an introductory Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0712 - CRITICAL MAKING

Minimum Credits: 3
Maximum Credits: 3
The Maker movement is an emerging social and media form that is at once highly networked and post-digital. Making is situated at the intersection of social media, the online gift economy, and a participatory, interventionist engagement with one's physical environment. Drawing on open source ideals and innovation structures -the free sharing of code to enable collaborative development - making has become an attempt to democratize material culture through networked access to tools. MakerSpaces and MakerHubs have become critical nodes in efforts to materialize the virtual gift economy of the Internet. In this course we will engage the intellectual and practical roots of this new medial and social form and engage in our own critical making projects, utilizing scanning, modeling, and 3D printing technologies. We will begin by looking at the history and philosophy of open source software development, and then the political, social, cultural, and technological developments that have together given rise to critical maker culture. We will then learn some of the basic tools of scanning, modeling, and 3D printing. After initial modeling and printing assignments, students will form groups and develop collaborative final projects that involve materializing complex conceptual relationships from a topic of your choice and in a medium of your choice. The aim of this course is to "close the circuit" between creative conceptual production, social networking, and materialized object relationships. Critical making is about critically engaging and creatively remaking the world around us. By the end of the semester, you will become a critical maker! This is a Critical Studies course with Production elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 0812 - MEDIA/ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
From the late twentieth century to the present, ecology as a scientific discipline and set of cultural narratives has risen to the forefront of knowledge production as a way to study and understand complex biological systems, their environments, and their internal dynamics. During the same period, media systems have grown exponentially in complexity until they too have begun to exhibit some of the behaviors of ecological systems, including self-organization, feedback, evolution, and emergent properties. The term "media ecology" captures both this new, nonlinear systems approach to understanding media itself as well as the intersection between natural ecosystems and the technological assemblages with which they are intertwined. This course will explore both media that interface with natural ecosystems and works that engage contemporary media systems at different scales. The secret life of information, contagious media, and the post-natural ecologies of our present and future will challenge us to conceive of Media and Ecology as a single coupled system: the emblem of our contemporary environment. Students will have the option to produce collaborative media projects that explore the themes of the course. These can take the form of simulations, games, network graphing, film or video projects, local ecosystem analysis and/or visualization, or the mapping and analysis of a media ecosystem that interfaces with the environment. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1190 - BRITISH FILM

Minimum Credits: 3
Maximum Credits: 3
This course explores the status of British film as a national cinema. It examines the forms and styles indigenous to British cinema; the relationship of British cinema to British social reality; the changes in film language, production and forms as they relate to the development of British cinema. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies, West European Studies

ENGFLM 1192 - IRISH FILM

Minimum Credits: 3
Maximum Credits: 3
Irish Film will consider what it means to think about films in terms of being a national cinema or part of the transnational cinema during the global Hollywood era. We will also consider how the UK and USA imagine Ireland as well as what effect Irish cinema has had on other cinemas due to immigration and the increasing visibility of Irish directors, locations, and actors in the international industry. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor, and also counts for the Irish minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES

Minimum Credits: 3
Maximum Credits: 3
After the 1917 revolution in Russia, Lenin famously said: "to us film is the most important of all the arts." Communists were to use cinema for propaganda purposes, in order to carry out massive state-wide campaigns aiming to bring radical social change. However, Soviet avant-garde filmmakers were also concerned with revolutionizing filmmaking itself. Some three decades after Lenin's remarks, the leaders of the countries of Eastern Europe which had become "Soviet satellites" after World War II, attempted to use censorship and control over the arts and cinema to produce effective propaganda for their own political campaigns. Writers, artists, and filmmakers were coveted allies of these new communist regimes that came to power in the 1940s. Again, however, filmmakers and actors did not always toe the Party line. Some were able to use film to craft complex works with subtle messages portraying aspects of daily life as it was experienced by ordinary people under the new regimes. Films that we will watch and analyze, released in Hungary, Romania, Yugoslavia, Poland, and Czechoslovakia in the decades before the fall of communism in 1989 managed to depict, evoke, and criticize "really existing communism." This course will trace the history of East European communism and of East European film-making from 1944 to 1990, acquainting students with examples from an exceptional body of cinematographic work together with the broad outlines of East European history. Students will learn to "read" films from 20th century Eastern Europe in their cultural, political, and historical context. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGFLM 1290 - AMERICAN FILM 1

Minimum Credits: 3
Maximum Credits: 3
This course explores the development of American film from 1895 to 1939. Though the course will emphasize the evolution of American film style and genre, attention will also be paid to the history of the American film industry, and the relationship between Hollywood cinema and the broader cultural context of American society. The course will provide the student with the historical and aesthetic background with which to better appreciate the American cinema of today and yesterday. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1291 - AMERICAN FILM 2

Minimum Credits: 3
Maximum Credits: 3
This course explores the development of American film from 1940 to the present. The course examines the evolution of American film style and genre, the history of the American film industry, and the relationship between Hollywood cinema and the broader cultural context of American society. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1390 - CONTEMPORARY FILM

Minimum Credits: 3
Maximum Credits: 3
Surveys international film from 1970 to the present and the major film movements of the period. It also demonstrates the stylistic and cultural interrelationships between the international film schools. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGFLM 1391 - TOPICS IN CONTEMPORARY CINEMA

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. This course deals with issues related to contemporary cinema. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1400 - SUPERHEROES ON FILM AND TELEVISION

Minimum Credits: 3
Maximum Credits: 3
This course explores a wide range of issues relevant to the superhero genre in popular media, including: the origins of the genre; various cultural critics' responses to it; the intersections between superhero narratives, audiences, and the cultural and historical contexts that produce them; and the ever-changing form and structure of the genre itself. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1410 - BOLLYWOOD AND INDIAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course will offer an overview of various Indian cinema traditions in their historical, aesthetic, and cultural contexts. Students will learn how to analyze Indian films from the 1920s to the present in terms of formal techniques, narrative conventions, and viewing contexts and also in terms of broader historical contexts such as colonialism and the independence movement. The history and formal conventions of Mainstream Bombay Cinema will be counterpointed with other kinds of Indian film. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, Film Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ENGFLM 1420 - TRANSNATIONAL EAST ASIAN CINEMAS

Minimum Credits: 3
Maximum Credits: 3
This survey course comparatively studies the forms and histories of East Asian cinemas in the context of transnationalism, post-colonialism, regionalism, and globalization. This course, therefore, will explore the transnational connections among different film cultures in China, Taiwan, Hong Kong, Japan, and South Korea. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ENGFLM 1460 - GLOBAL STARDOM AND CELEBRITY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the analysis of the "star text" of individual stars/celebrities, which involves the interrelationship of screen-mediated roles, off-screen appearances and information, publicity material, and cultural context. Students will research a specific star/celebrity as a nexus of global circulation and fandom, while addressing some core methodological questions: what is the difference between star biography and star analysis? How do we read the "star/celebrity text" in different local contexts and ideas about the public and the private? How does stardom presume and shape norms of identity pertaining to gender, sexuality, social class, race/ethnicity, bodily norms, and other cultural values? This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1470 - FILM DIRECTORS

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific director. This course looks at the mode of production of films and works to understand the interweaving contributions of directors, producers and screenwriters. It will also consider less personal forces--social climate, studio style, genre and audience taste. It examines the films of particular directors for signs of personal style, theme, or personal preoccupation. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1471 - ORSON WELLES

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the screen career of Orson Welles. In considering his films, the course explores the evolution of Welles' cinematic style; the thematic concerns of his work; the ideological implications of his fictional universe; and his contribution to the development of American narrative cinema. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1472 - HITCHCOCK'S FILMS

Minimum Credits: 3
Maximum Credits: 3
This course will look at the development of Hitchcock's cinema as a way of touching upon issues central to the study of film as a cultural force; the relationship between art and entertainment; the social origins of suspense and fear; the role of the director in creating a film's meaning; the role and function of genre and cross-generic influence. We will closely look at films from all phases of Hitchcock's career and examine what their style, tone, and subject matter reveal about the powers of cinema and Hitchcock's influence on a new generation of directors. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Film Studies, West European Studies, Writing Requirement Course

ENGFLM 1473 - SPIKE LEE

Minimum Credits: 3
Maximum Credits: 3
Spike Lee's films, videos, and TV work have been both provocative and groundbreaking, challenging the structures of American filmmaking at the level of production, reception, and film style. Including feature films, documentaries, music videos, and mini-series, his work has a diversity that discourages the restrictive labels of African-American director or independent director. This course will cover most of this body of work in terms of Lee's cinematic style and cultural concerns, and also in terms of the cultural debates his work has triggered or participated in. By the very nature of these films, a Spike Lee course has to engage with much more than directorial style and vision alone, and will thus also be an opportunity to consider various approaches to the study of film. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1476 - THE FILMS OF STANLEY KUBRICK

Minimum Credits: 3
Maximum Credits: 3
This course aims to discover the extent to which Kubrick's films are unified in style and theme. We will explore their sources in other films, reputed novels and short stories. Special attention will be paid to themes commonly found in Kubrick; a satirical view of society, the links between violence and sexuality, etc. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1479 - CHILDREN AND MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course examines contemporary children's media from social, cultural, and historical perspectives, with a focus on media in the United States produced by and for children ages 0-13. Video games, the internet, and emerging digital and portable technologies for communicating and consuming media are often tailored specifically to children, who, as "digital natives," are increasingly early adopters of new technologies. This course asks how children's media fits into contemporary debates about children's role in families, schooling, and the public sphere. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1480 - TOPICS IN FILM

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. Explores selected issues in the production, reception, themes, or theory of film. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1481 - TEEN FILM

Minimum Credits: 3
Maximum Credits: 3
This course will look at a type of film that has been prominent in Hollywood and international cinema since 1955: the youth film or teen film or teenpic. The teenpic has been variously defined as films targeted at a teenage market and as films about teenagers (and sometimes both). In considering the teenpic as a genre, we will attempt to break it down into subgenres such as the juvenile delinquent film, the teen musical, the teen horror film, nostalgic teen films, postmodern youth cult films, African American teen films, "girl" teenpics, and LGBTQIA+ teenpics. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1482 - THE STAR SYSTEM AND THE MOVIES

Minimum Credits: 3
Maximum Credits: 3
This course will deal with all aspects of the phenomenon of stardom in film: the production of stars, film acting, and fandom. This is not a course on any particular star, but we will use case studies of individual stars for our weekly focus. We will draw on film examples from the old Hollywood studio system as well as from post-studio films and popular culture. A particular emphasis of the course will be gendered differences between star images. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or

ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Film Studies, Writing Requirement Course

ENGFLM 1483 - FILM SOUND

Minimum Credits: 3
Maximum Credits: 3
In this course, we will shift the way we think about films and learn to listen to films, using the language and tools of audio analysis to analyze the aural environment produced by films. Topics include the history of film sound, the relation of sound and image, aural and visual pleasures, sound and narrative meaning, soundscapes and theories of shock and modernity, the aesthetics of analog and digital sound in cinema, the 'realism' of recorded sound, film sound and space, sound in documentary cinema, and culturally specific theories of sound. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1485 - FILM AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course examines film production, economics and forms of representation as reflections of political attitudes. We will study a variety of narrative and non-fiction films which reveal differing political points of view, ranging from those that legitimize the dominant culture to those which criticize, if not challenge, dominant attitudes. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGFLM 1487 - FILM CENSORSHIP AND AMERICAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course considers some of the most important censorship battles in American history. As the first mass medium to pose a serious threat to the cultural hegemony of the genteel middle class, the movies initiated both a debate about the place of media in our society and a series of struggles over the control of commercialized leisure. This course seeks a deeper appreciation of the complexities of contemporary media politics through an engagement with the history of motion picture regulation. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGFLM 1489 - CULT FILM

Minimum Credits: 3
Maximum Credits: 3
This course will interrogate the criteria by which a film is identified as cult. A cult movie is not made; a film only becomes cult through the consumption patterns of an audience. This course explores how the nature of cult viewership shifted in response to technological innovation: at first VCRs, then DVDs, and now the internet. This course also looks to how cult has shifted now that unavailable films or banned films are increasingly accessible due to shifts in new media and the dominance of internet commerce (international shopping, eBay, bootlegs, downloads). This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGFLM 1490 - POLITICAL MEDIA: FILM AND POWER IN THE 20TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This class examines the way media has been constructed and used by elite institutions to advance broad and specific goals for the management of populations and the establishment of political and economic conditions beneficial to those institutions. It also looks at the use of media by progressive and radical groups to challenge those conditions and institutions, beginning in the early twentieth century and expanding in the era of digital media. It includes particular focus on cinema and imperialism, making use of the resources in London and online at the Colonial Film Project. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGFLM 1493 - CITY MADE STRANGE: LONDON ON SCREEN IN HORROR AND SCIENCE FICTION CINEMA

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This course aims to explore the deep funds of strangeness and otherness that permeate London's places and spaces, through examining films and television series that show the city as a brimming reservoir of past and future shocks. The course will examine science fiction, horror and noir/neo-gothic cinema and television from all eras, with a particular emphasis on works that take London itself as a major part of their story. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1495 - CITY SYMPHONY

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. The city has been an integral part of the filmmaker's vocabulary since cinema's genesis in the late nineteenth century. The urban environment and the craft of film grew up together in the twentieth century, seasoned by various convergences of technology, one notable one in the 1920s and another over the last fifteen years. This course bridges these two periods, drawing on history and theory to interrogate the form of the city symphony film essay, and develop an urban filmmaking practice that allows students to gather and formulate their own reflections on London. The course is made up of two strands, City Symphony and Urban Scavenger, taught by the same team in double sessions. Students will be strongly encouraged to bring ideas from one to the other, and to combine critical analysis with practical filmmaking. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1497 - URBAN SCAVENGING

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This course will give students a critical look at the writing, development, and production of film in the 21st century. Using case studies and examples from the masters of filmmaking in both the United States and the United Kingdom, students will gain in-sight into the nature of production, the economics of making a film, and the potential avenues through which film can be distributed to an audience. This is a Critical Studies course with Production elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1499 - INDUSTRY INSIDER: FROM SHOWRUNNER TO FINAL CUT

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This course will give students the opportunity to learn about

screenwriting from a professional screenwriter and producer. The scope of the course will take students through the process of writing for screen based on the very simple stages of concept, story, outline, draft, and the revision and development process. Students will also learn about the pitch process and be given opportunities to practice the pitch based on their own individual stories. This is a Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGFLM 1585 - CINEMA AND REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course investigates the relationship between Black power era, Black American cinema, and the third cinema movement, which are traditionally understood to be distinct movement/moments only loosely related through overlapping politics. In the course, our primary focus will be third world and Black American film making, and the postcolonial, pan-national and militant theoretical texts and movements that influenced the directors. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement

ENGFLM 1610 - TOPICS IN GENRE

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. This course considers genres that are not commonly offered. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1613 - TOPICS IN FILM GENRE AND THEME

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. This course seeks to provide a forum for new issues that might arise in the area of film genre and/or the thematic of film representation. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1615 - THE WAR FILM

Minimum Credits: 3
Maximum Credits: 3
This course will consider stable and changing elements of the war film genre, while remaining attentive to specific cultural moments, beginning with World War I. Although the main emphasis of the course will be on the war film as genre, part of the semester will be devoted to documentary and non-fiction approaches to war in cinema. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1670 - GLOBAL ANIME

Minimum Credits: 3
Maximum Credits: 3
This course introduces the arts, history, and culture of Japanese animation (anime) in a global context. We will focus on analyzing the forms and

idioms of anime in relation to changing technological conditions and the media environment. Students are expected to relate the aesthetic and cultural characteristics of anime with their own experience of digital technologies, and to expand their interest in anime to wider theoretical questions about techno-culture and new media. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGFLM 1671 - MAKING THE DOCUMENTARY

Minimum Credits: 3
Maximum Credits: 3
This is a production course in which students will research, define, and schedule their own projects. The class covers all stages of producing a documentary from the idea through development, preproduction, production and postproduction and will examine the fundamentals of the art of documentary making: artistic identity, point of view and storyteller, form and style, and light and sound etc. Students will develop and produce original documentary short film in a collaborative learning environment, working in small groups (of two or three students). They will write, develop, and shoot their own short documentary project (8 to 10 minutes). While those interested in writing or filmmaking will find practical uses for their skills in this course, students from all disciplines - writing, science, film studies, or general liberal arts - are welcomed, and will find benefit in the acquisition of skills for presenting, representing, and persuading via sound and image. No filmmaking experience is necessary. This is a Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1672 - VISITING FILMMAKER: PRODUCTION AND CRITICISM

Minimum Credits: 3
Maximum Credits: 3
This course allows students to experience the full process of making a professional micro-budget feature, experimental, or documentary film. Students work on a visiting filmmaker's film from conception to final shooting, while learning about the different jobs/tasks/departments needed to realize a completed work. This is a Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

ENGFLM 1680 - ANIMATION STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course surveys the history of animation, both American and international. Providing an understanding of animation's history, technologies, and stylistic possibilities across national and international boundaries, the course will consider early animators through to contemporary uses of digital technologies with their fully realized characters inhabiting three-dimensional space. It will also have a thematic organization, focusing at times on specific techniques (e.g., cel animation) and styles (e.g., abstract). This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1681 - FILM COMEDY

Minimum Credits: 3
Maximum Credits: 3
This course surveys film comedy from the silent period through the contemporary moment. It focuses on major comic performers and directors as well as on comic forms, traditions and their relation to politics. In addition the course considers a number of comedy subgenres, such as slapstick, romantic comedy, gross-out comedy, and the buddy film. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1683 - DOCUMENTARY FILM

Minimum Credits: 3
Maximum Credits: 3
This course explores the nature and impact of the non fiction film, its changing forms, strategies for movies, and claims to veracity and objectivity. It is concerned with identifying types of documentary, the "motives" of such films, their audience and the problems posed by "documenting reality." This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGFLM 1684 - MOCKUMENTARY: PRODUCTION AND CRITICISM

Minimum Credits: 3
Maximum Credits: 3
The mockumentary - a fictional film made to "look like" a documentary - became popularized as a term to describe a distinct genre in coverage of Rob Reiner's 1984 film This is Spinal Tap. Since then, the genre has evolved to treat a variety of subjects through a range of styles - including straightforward hoaxes, social parodies, and sharp criticisms of nonfictional form. In addition to readings, lectures and discussions, students in this class will produce short mockumentary projects. Previous production experience is not required. This is a Production course with Critical Studies elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1685 - FILM MUSICAL

Minimum Credits: 3
Maximum Credits: 3
This course studies the musical as an example of a popular art in the age of mass culture, looking at the aesthetics and history of this genre as it relates to the culture that produced it. We will be looking at musicals with the goal of analyzing and understanding our reactions, and those of the mass audience. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1688 - FILM WESTERN

Minimum Credits: 3
Maximum Credits: 3
This course examines the meaning of the Western to a mass audience. More specifically we will explore the genre's popularity, the way it represents the past, the concept of the mythic hero, changes in the genre over time, and the contributions of specific directors. We will consider how the Western adapts to changing concepts of America. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1694 - THE AUSTRALASIAN NIGHTMARE

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at Pitt in Sydney. The classic American horror is derived from a gothic heritage, an inheritor of a European context and its tropes; the falling apart of civilization through wars, disease, economic collapse, and a deconstruction of society. The horror that the current, post 9/11 generation has produced is inherently different; it plays upon central themes that pull from an Australasian context, driven from the horror films of Australia, Japan, and Korea. These films have been made and distributed outside of an American context but then repackaged to the west in remakes and revisits that awaken an American audience to themes of horror that are decidedly non-European in identity. This course will examine these films, comparing and contrasting European and Australasian tropes for horror as well as their reflection and impact on society. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Study Abroad

ENGFLM 1695 - HORROR FILM

Minimum Credits: 3
Maximum Credits: 3
This course will investigate the key films and critical discussions surrounding the horror genre from its silent film beginnings to the present. We will use horror as a lens to ask wide-ranging questions about spectatorship, theory, history, aesthetics, and politics that have shaped and continue to transform film and media studies. This course examines horror subgenres, the ways that producers and directors have developed the genre, and the ways horror film exploits social attitudes and values to generate audience involvement. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGFLM 1696 - FILM NOIR

Minimum Credits: 3
Maximum Credits: 3
This course will explore film noir from its classical period 1941-1958 (e.g. Double Indemnity), to contemporary films considered to be 'neo-noir' since the 1970s (e.g. Taxi Driver, Blade Runner, Fight Club, Memento, etc.), and the international films described as 'global noir' from Japan, Hong Kong, Europe, and many other places throughout the world. We will look at these films and media objects from the perspective of film art and history, of their relationship to wider socio-cultural contexts, and of their exploration of gender and sexuality. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1699 - SCIENCE FICTION FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the development of science fiction as a cinematic form, its relationship to genres such as horror and melodrama, its structure, images and style. We will trace linkages between the films and social, political, scientific and aesthetic attitudes within the culture. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

ENGFLM 1703 - GENDER AND FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines and questions aspects of gender and sexuality in international cinema. While the course considers the intersectional realities affecting masculinity and femininity on-screen, it will also consider who is behind the camera and ideas of "authentic" representation. Attention will also be paid to the social and historical context in which these films were made, in an attempt to understand the relationship between art and ideology. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, Film Studies, SCI Diversity General Ed. Requirements, Writing Intensive Course (WRIT)

ENGFLM 1750 - CREATIVE PRODUCTION WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
Creative Production Workshop is a projects-based course in which students will research, define, schedule, budget, and workshop their own independent projects. The primary goal of the course is to design and execute a self-directed, self-designed, creative project in a collaborative environment. This process can be broken down into a series of smaller goals, including: pre-production, treatment, pitching, project design, and peer workshopping. This is a Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

ENGFLM 1752 - TELEVISION ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course studies television as a visual medium, an industry, and as a cultural force by examining the forms television programming takes and the way these structures influence viewer response. We will examine specific television genres from longstanding series types (sitcoms, cop shows, serials, etc.) to the gendered forms of "quality" television. This is a Critical Studies course with Production elements and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Children's Literature, DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

ENGFLM 1760 - CINEMA AND VIDEO GAMES

Minimum Credits: 3
Maximum Credits: 3
This course introduces a comparative study of cinema and video games, exploring their historical, cultural, aesthetic, technological and industrial intersections. Combining film screenings with game plays, we will try to understand how cinema and video games inform, influence and converge with each other. We will focus on race, gender, and ethical issues of visual representations in both cinema and video games. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGFLM 1790 - FILM AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Cinema has enjoyed a close relationship with literature, borrowing from literary source texts and forms. Yet this relationship is not uncomplicated, nor is it unidirectional: the cinema offers new possibilities for novelistic source texts, poses interesting problems for literature's authors and readers alike and provokes a reconsideration of age-old debates of the divide between words and images. Thus this course examines film's convergence with, and divergence from, literary forms. Poised at the intersection of the study of film and the study of literature, it enables us to explore what is most unique -- and perhaps most interesting -- about each of the media as we consider their overlap. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

ENGFLM 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
The independent study option permits students to design courses of their own with approval of a department faculty member. Students are required to submit a proposal to a faculty member; usually, this faculty member is one that the student has worked with before and is comfortable with the subject matter of the study. Specific forms for requesting faculty approval are available in the department advising office. The forms require a

description of the project, a list of the requirements and readings that the student and the faculty sponsor have agreed upon, the signature of the faculty sponsor, and the signature of the department adviser. A student must have earned at least 6 credits in film studies courses and the study proposed must not duplicate the content of regularly offered courses.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGFLM 1904 - UTA IN FILM STUDIES

Minimum Credits: 1
Maximum Credits: 3
Undergraduate Teaching Assistants are arranged with individual faculty members and require special permission. A range of credit hours and grading options are available.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGFLM 1920 - ADVANCED SEMINAR IN FILM STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course is designed for Film and Media Studies majors and can be taken only when all other major requirements are satisfied. It will focus on issues of film history (either as an historical survey or through an examination of particular themes and/or problems that have arisen in the critical literature). The class will be organized as a seminar, and will involve considerable writing and/or class presentation on the part of students. This Category II course is a required capstone in the Critical Studies track of the Film and Media Studies major.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Film Studies, Global Studies, Writing Intensive Course (WRIT)

ENGFLM 1930 - INTERNSHIP IN FILM

Minimum Credits: 1
Maximum Credits: 3
Internships can be taken for credit with special permission from the Internship Coordinator in Film and Media Studies. One internship can count for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

English Language Institute

ELI 0001 - ELI: ONE COURSE

Minimum Credits: 0
Maximum Credits: 0
The ELI offers English classes in speaking, listening, reading, writing, and grammar at three proficiency levels: low intermediate, high intermediate, and advanced. Eli students register for ELI 0001 when they are taking only one ELI course in any given semester.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0002 - ELI: TWO COURSES

Minimum Credits: 0
Maximum Credits: 0
The ELI offers English classes in speaking, listening, reading, writing, and grammar at three proficiency levels: low intermediate, high intermediate,

and advanced. Eli students register for ELI 0002 when they are taking only two ELI courses in any given semester.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0003 - ELI: THREE COURSES

Minimum Credits: 0
Maximum Credits: 0
The ELI offers English classes in speaking, listening, reading, writing, and grammar at three proficiency levels: low intermediate, high intermediate, and advanced. Eli students register for ELI 0003 when they are taking only three ELI courses in any given semester.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0004 - ELI: FOUR COURSES

Minimum Credits: 0
Maximum Credits: 0
The ELI offers English classes in speaking, listening, reading, writing, and grammar at three proficiency levels: low intermediate, high intermediate, and advanced. Eli students register for ELI 0004 when they are taking only four courses in any given semester.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0005 - ELI: FIVE COURSES

Minimum Credits: 0
Maximum Credits: 0
The ELI offers English classes in speaking, listening, reading, writing, and grammar at three proficiency levels: low intermediate, high intermediate, and advanced. Eli students register for ELI 0005 when they are full-time ELI students in any given semester. Full-time students always register for five courses.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0006 - ELI: SIX COURSES

Minimum Credits: 0
Maximum Credits: 0
The eli offers English classes in speaking, listening, reading, writing, and grammar at three proficiency levels: low intermediate, high intermediate, and advanced. Eli students register for ELI 0006 when they are taking six courses in any given semester.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0007 - PROFESSIONAL AND ACADEMIC ENGLISH PROGRAM

Minimum Credits: 0
Maximum Credits: 0
This is an intensive, 6-week program for international students planning to attend graduate programs in the US. Students must already be accepted to a US graduate program or have a TOEFL 550/80 IBT score. Classes meet for five hours a day, four days a week. Class content will help students develop both language and academic/professional skills, including giving oral presentations, developing reading and listening strategies and understanding the educational culture of us graduate schools.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0021 - LISTENING LEVEL 2

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0022 - SPEAKING LEVEL 2

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0023 - READING LEVEL 2

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute0

ELI 0024 - WRITING LEVEL 2

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0025 - GRAMMAR LEVEL 2

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0031 - LISTENING LEVEL 3

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0032 - SPEAKING LEVEL 3

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0033 - READING LEVEL 3

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0034 - WRITING LEVEL 3

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0035 - GRAMMAR LEVEL 3

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0041 - LISTENING LEVEL 4

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0042 - SPEAKING LEVEL 4

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0043 - READING LEVEL 4

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0044 - WRITING LEVEL 4

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0045 - GRAMMAR LEVEL 4

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0051 - LISTENING LEVEL 5

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0052 - SPEAKING LEVEL 5

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0053 - READING LEVEL 5

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0054 - WRITING LEVEL 5

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0055 - GRAMMAR LEVEL 5

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0061 - LISTENING LEVEL 6

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0062 - SPEAKING LEVEL 6

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0063 - READING LEVEL 6

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0064 - WRITING LEVEL 6

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0065 - GRAMMAR LEVEL 6

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0110 - GENERAL ENGLISH EVENING COURSE

Minimum Credits: 0
Maximum Credits: 0
General English evening course
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0111 - English for Undergraduates (E4U)

Minimum Credits: 0
Maximum Credits: 0
Our English for Undergraduates (E4U) Program is designed to provide a foundation for international students to improve their language skills, academic skills, and cultural background so that they are better prepared for their academic studies in the US. The program is specifically designed for international students who: 1) Have been accepted by an undergraduate program at a university in the US or 2) Have a TOEFL iBT score of 60 (IELTS 6) or higher and are considering applying to undergraduate programs at a university in the US
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

ELI 0120 - PROFESSIONAL AND ACADEMIC ENGLISH PROGRAM

Minimum Credits: 0
Maximum Credits: 0
Professional and academic English program
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: No Grade Required
Course Requirements: PROG: English Language Institute

English Literature

ENGLIT 0300 - INTRODUCTION TO LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course examines the definitions, functions, and values of literature by reading across a range of genres, styles, historical periods, and cultures. It will also introduce various reading strategies for making sense of plays, poems, novels, short stories, and essays.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0305 - IMAGINING SOCIAL JUSTICE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 0310 - THE DRAMATIC IMAGINATION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the major dramatic forms and compares the ways playwrights from several centuries use ideas, characters and dramatic techniques. We will consider how social, historical, and dramatic contexts influence our interpretations and evaluation, or may lead to alternative understandings of a play.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0315 - READING POETRY

Minimum Credits: 3
Maximum Credits: 3
Poetry is usually the first literary form to evolve in a culture. Yet many today reject it as artificial, overly refined and removed from ordinary human experience. By studying various kinds of poetry, this course aims to help students break down the barriers between classic poems, contemporary poetry, and a more general lyric impulse. As the most highly condensed literary experience, poetry invites very close reading, so we will explore various techniques for making sense of poems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0318 - WRITING IN PARIS

Minimum Credits: 3
Maximum Credits: 3
Students will study the American writers who lived in Paris during the 1920s "the lost generation" and the ways they were influenced by Paris and its culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGLIT 0321 - ESSAYS AND MEMOIRS

Minimum Credits: 3
Maximum Credits: 3
This course examines different uses of prose narrative in both fiction and non-fiction. Texts include memoir, essay, novels, short stories, travelogue, and biography.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0325 - THE SHORT STORY

Minimum Credits: 3
Maximum Credits: 3
This course studies short stories that explore a variety of themes. It seeks to define the short story as a specific literary genre and to distinguish it from earlier forms of short narrative literature. It then goes on to examine the effects of literary, cultural and historical traditions on these stories and their reception.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0330 - GREAT BOOKS: A SEMINAR IN THE MODERN HUMANITIES (PART 1)

Minimum Credits: 3
Maximum Credits: 3
The course centers on classic texts of world literature, from homer, to the Koran, to Emerson and Woolf. This course is meant for all students who have an intellectual interest in the complex resources of some of our shared traditions as well as a healthy curiosity about the history of our present. In other words, this seminar is intended to make available a demanding, but still selective encounter with works of high aesthetic, intellectual, and indeed even political importance. (Part 1 of a 2-semester course)
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0331 - GREAT BOOKS: A SEMINAR IN THE MODERN HUMANITIES (PART 2)

Minimum Credits: 3
Maximum Credits: 3
The course centers on classic texts of world literature, from homer, to the Koran, to Emerson and Woolf. This course is meant for all students who have an intellectual interest in the complex resources of some of our shared traditions as well as a healthy curiosity about the history of our present. In other words, this seminar is intended to make available a demanding, but still selective encounter with works of high aesthetic, intellectual, and indeed even political importance. (part 2 of a 2-semester course)
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0333 - PARIS THROUGH THE AGES

Minimum Credits: 3
Maximum Credits: 3
The readings will introduce students to French writers who were influenced by Paris and who influenced the city and its intellectuals, from the Middle Ages through the twentieth century. This study abroad course includes excursions through the streets and museums of Paris. Taught in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ENGLIT 0354 - WORDS AND IMAGES

Minimum Credits: 3
Maximum Credits: 3
This interdisciplinary course explores the relationships between language and the diverse kinds of images that often accompany it (film, video, photography, book illustration, painting, etc.). The goal is to study the parallels and differences between images and words (as systems of communication) and to understand how they can productively interrelate within creative works such as literature, films, videos, and photographic studies.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0365 - IMAGINING SOCIAL JUSTICE

Minimum Credits: 3
Maximum Credits: 3
This course questions the relationship between present and/or "contemporary" literature and past literary traditions. It is not a course solely in contemporary literature but a course that compares contemporary texts with texts from other periods. It investigates the contemporary as both a complex reworking of past narratives and traditions and as the production of the experimental and the new.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0367 - THE LAW IN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will examine literary representations of the law, legal issues, punishment, and legal ethics, using works that range from, "Twelve Angry Men" to "Soul on Ice" to "The Indian Lawyer."
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

ENGLIT 0370 - LITERATURE AND IDEAS

Minimum Credits: 3
Maximum Credits: 3
This course studies invention and interpretation, and explores the various ways writers produce texts and readers make them make sense. Though texts may change from section to section and instructor to instructor, they always stimulate investigation into reading and writing as ways of knowing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*

ENGLIT 0375 - INTRODUCTION TO OPERA

Minimum Credits: 3
Maximum Credits: 3
This course, offered jointly in collaboration with the artistic and educational staff of Pittsburgh opera, provides an interdisciplinary introduction to the multimodal and synthetic art form of opera. Over the course of the semester, we will explore the essential literary, musical, and dramatic elements that have shaped the development of opera throughout the past four-hundred years. We will study a variety of historically significant operatic works, each representing a different style in the evolution of this art form. Every semester, the class as a whole will also attend two current opera productions staged by Pittsburgh opera.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0380 - SLOVAK TRANSATLANTIC CULTURES

Minimum Credits: 3
Maximum Credits: 3
Slovak European history and the interaction of Slovak and American cultures during the 120-year history of Slovak immigration is conveyed through readings in Slovak and Slovak-American literature, and through issues in literary theory that concern this theme. The course is structured around the history of Slovak, and in a broader cultural sense central European immigration to the U.S. With a special focus on Pittsburgh. Students are encouraged to investigate Pittsburgh's rich ethnic heritage and to research and write on topics tailored to individual interests.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

ENGLIT 0500 - INTRODUCTION TO CRITICAL READING

Minimum Credits: 3
Maximum Credits: 3
This course studies three to five significant literary works in conjunction with influential criticism on each text. Students explore the uses and limits of different critical methods. The course seeks to develop a critical understanding of both classic literary texts and dominant modes of reading as changing cultural practices.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0505 - HOW TO DO THINGS WITH LITERATURE 1

Minimum Credits: 3
Maximum Credits: 3
We explore the historical, generic, and transnational range of literature in English as an object and field of study. A variety of lecturers introduce the concepts of periods and "key moments".
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0506 - LITERARY FIELD STUDIES

Minimum Credits: 3
Maximum Credits: 3
In this course, students will learn about and practice the various activities central to literary studies. Students will learn how to frame interesting critical inquiries and conduct original research, which could include historical research or contemporary cultural study. Students will engage with books as historical objects, which will include learning about the history of books and other print media and studying the ways that material factors shape writers' work. This could include visiting the library's Special Collections and/or a creative project around bookmaking. Students will engage in a variety of interpretive practices, including taking creative and inventive approaches to critical work and adapting texts for new purposes. Students will attend live performances and readings by diverse contemporary writers, gaining insight into the process of how great literature is made. Students will have the opportunity to find new intersections between literature and other disciplines. Finally, students will be invited to approach a range of writing projects as active makers, attending carefully to the formal elements of their own writing as well as that of others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0510 - MAKING THE BOOK

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0511 - HISTORICAL BACKGROUNDS OF ENGLISH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course surveys the major development in English social and political history, concentrating on those that had the greatest impact on the development of English literature.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGLIT 0512 - NARRATIVE AND TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course explores the ways in which new technologies impact how we engage with stories. It examines the relationship between traditional literary forms and contemporary media, such as hypertext, web logs, fan fiction, video games, comics, and interactive fiction. As a writing-intensive course, "Narrative and Technology" will ask students to write regularly in response to course texts and class discussions. Students will have opportunities not only to write critically about the relationships among narratives and technologies but also to write creatively, experimenting with interactive, hypermedia, and/or other new media forms.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0515 - CONTEMPORARY AFRICAN AMERICAN POETRY

Minimum Credits: 3
Maximum Credits: 3
This course explores the rich and diverse field of contemporary poetry by African Americans, which has witnessed a marked growth over the last three decades. It examines the range of styles, aesthetic projects, and concerns of contemporary black U.S. poets, including the relation of various forms of experimentation to tradition; vernacular, oral, and musical expression; questions of race, culture, and identity; globalization and diasporic movements; the individual and society.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0521 - SCAN CULTURE: SURVEILLANCE AND THE DIGITAL

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0541 - LITERATURE AND MEDICINE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0550 - INTRODUCTION TO POPULAR CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course covers texts from American mass culture-popular fiction, advertising, popular music, television, etc. It will explore methods of analyzing these texts, discovering what these products have in common and what distinguishes them from other cultural artifacts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Childrens Literature, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies, Writing Requirement Course

ENGLIT 0560 - CHILDREN AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course studies children's literature through an investigation of the history of childhood through its representations in children's books and other media.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0562 - CHILDHOOD'S BOOKS

Minimum Credits: 3
Maximum Credits: 3
This course surveys the field of children's literature from its earliest beginnings to the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 0570 - AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This first course in American literature explores the characteristic features of writings from the colonial period to the present. It emphasizes the interaction between literary texts and their social contexts, and examines the emergence of a national literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0572 - INTRODUCTION AFRICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Examining major works by contemporary African writers in various genres, including fiction, poetry and drama. Some preliminary reading and discussion of social context of the works. Principal focus on recurring themes in African literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0573 - LITERATURE OF THE AMERICAS

Minimum Credits: 3
Maximum Credits: 3
Literature of the Americas introduces students to important issues in the study of literature and culture by focusing on colonial and postcolonial traditions in regions of the Americas beyond the United States. Beginning with the European "discovery" of the "new world", it examines comparatively literary and other texts from Britain, the West coast of Africa, the US, Canada, the Caribbean and Latin America, tracing the emergence of distinctive literary traditions and preoccupations of the Americas through to significant modern incarnations.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, Latin American Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0580 - INTRODUCTION TO SHAKESPEARE

Minimum Credits: 3
Maximum Credits: 3
This course will focus on a number of Shakespeare's major plays from all phases of his career. Class discussion will consider the historical context of

the plays, their characterization, theatrical technique, imagery, language and themes. Every attempt will be made to see the plays both as poems and as dramatic events.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)

ENGLIT 0590 - FORMATIVE MASTERPIECES

Minimum Credits: 3
Maximum Credits: 3
This course will study in some detail eight or nine of those masterpieces which form the largest part of what we now regard as the Western tradition of literature. The works chosen will come from various genres--epic poetry, drama, the novel, and satire. They will span the centuries from the classical periods of ancient Greece and Rome through the Renaissance and into the nineteenth century.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0597 - BIBLE AS LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This introductory course acquaints students with what is in the bible and provides background information drawn from various disciplines about the elements and issues that give it its distinctive character. Attention is necessarily given to its religious perspectives, since they govern the nature and point of view of the biblical narratives, but no specific religious view is urged.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0610 - WOMEN AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
An exploration of writings by and about women. Through our reading of various literary forms -- poetry fiction, autobiography -- we will explore the aspirations and realities of women's lives. We will consider how social issues -- class, race, etc. -- Affect women writers.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

ENGLIT 0612 - LITERATURE AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course aims to restore and improve the dialogue between scientific and critical-humanistic ways of understanding the world. It examines the share both ways of knowing have had in shaping our culture and our ideas by studying (and developing critical perspectives on) both scientific and literary texts. Its goal is to produce an understanding of the common history of literature and science. The course usually focuses on a theme, issue, or topic that has historical range and contemporary relevance. Different versions of the course might focus on social, literary, and scientific understandings of gender; the social, literary, and scientific attitudes toward death and the dead; or the social, literary, and scientific definitions and theories about the ""human."" Though works of science fiction may be studied, this is not a course in science fiction. This course should be of particular interest to students in the sciences, students of literature, students of philosophy, and students of history.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: ENGLIT 0699

Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 0613 - ASIAN AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0616 - EXILES, NOMADS, AND MIGRANTS

Minimum Credits: 3
Maximum Credits: 3
The course reads various reflections on the immigrant's experience of separation or exile, the problems of encountering a new society, and the processes of acculturation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., Urban Studies

ENGLIT 0617 - CHANGING FAMILIES

Minimum Credits: 3
Maximum Credits: 3
This course will explore varying literary representations of unconventional families including families made by adoption, foster families resulting from migration, multiracial families, and families involving gay, lesbian, or transgender parents or children. Considering different points of view, it will examine plots involving search for family, search for identity, construction of family, loss, conflict, poverty, prejudice, and reconciliation. The course will explore how these works portray and relate to changing attitudes toward childhood, parenthood, heredity, nurture, race, class, nation, and sexuality. As a literature course, it will train students in close reading and critical analyses of texts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0618 - WAR

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0619 - THE LITERATURE OF THE GREAT WAR

Minimum Credits: 3
Maximum Credits: 3
This course focuses solely upon the literature that most poignantly depicts the experiences and perspectives of the soldiers who fought on the battlefields of World War I and the civilians who suffered its destruction. It will allow students to explore the most significant memoirs, poetry, and works of fiction that emerged from the ravaged battlefields of the western front and the ravaged homes destroyed by what some called "war to end all wars".
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

ENGLIT 0620 - THE GRAPHIC NOVEL

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0621 - AFRICAN-AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0625 - DETECTIVE FICTION

Minimum Credits: 3
Maximum Credits: 3
This course examines detective fiction in terms of its history, its social meaning and as a form of philosophizing. It also seeks to reveal the place and values of popular fiction in our lives.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0626 - SCIENCE FICTION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the major ideas, themes, and writers in the development of science fiction as a genre. Discussions will help students to understand and use critical methods for the analysis of science fiction. The topics covered include problems describing and defining the genre, contrasting ideologies in soviet and American science fiction, the roles of women as characters, readers and writers of science fiction, etc.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0628 - WORKING CLASS LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course explores writing produced by working-class men and women. It traces its textual traditions and explores questions of the status of the "working class", its relation to self-understandings in ethnic or gender terms as well as the effect of class on social experience, social vision and cultural production. It explores as well the relation between worker-writers and the dominant literary tradition.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Urban Studies

ENGLIT 0629 - THE WILD WEST

Minimum Credits: 3
Maximum Credits: 3
This course examines Westerns, the most popular and characteristic of American genres. We will read works by both "popular" and "literary" (or "serious") writers, as well as viewing movie Westerns.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0630 - SEXUALITY AND REPRESENTATION

Minimum Credits: 3
Maximum Credits: 3
This course will explore the relations between cultural texts and the shifting conceptualizations and figurations of sexuality and sexual politics over the past 150 years. The main objective of this course will be to understand the necessary but problematic relations between sexuality, cultural expression, and the social.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 0636 - THE GOTHIC IMAGINATION

Minimum Credits: 3
Maximum Credits: 3
This course examines the genre of gothic fiction, in Britain and the U.S., From its origins in the late 18th century until the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 0637 - HORROR LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0638 - STEAMPUNK

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement

ENGLIT 0640 - ALLEGORY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the subject of allegory.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 0642 - COMEDY

Minimum Credits: 3
Maximum Credits: 3
This course studies comedy, both its deep structural patterns and its surface humor. We will read works from many periods (from the Greeks through the 20th century) and genres to understand the literary and cultural meanings of comedy.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 0643 - SATIRE

Minimum Credits: 3
Maximum Credits: 3
This course studies satire in general, the techniques of certain satires in particular and the expression of satiric attitudes. We will examine satires from various times and countries so that we can better understand what satire is, how it differs from other literary forms and its function within the culture that produces it.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0644 - MYTH AND FOLKTALE

Minimum Credits: 3
Maximum Credits: 3
This course examines myths, legends and folktales. It explores contemporary views of such works as cognitive categories, models for behavior, "agents" for mediating "world" views, mirrors of culture, projections of sub conscious desires. In short it considers the connection between myth/folktales and the culture/intelligence that produced them.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 0645 - FANTASY

Minimum Credits: 3
Maximum Credits: 3
Focusing on works that offer fantastic alternations to the world of ordinary experience, this course examines works produced from the middle ages to the present day. It raises questions about our perceptions of "reality", and the effects of conscious or unconscious wishes, desires and fears on literary representations.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0646 - APOCALYPSE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0647 - HARRY POTTER: BLOOD, POWER, CULTURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0655 - REPRESENTING ADOLESCENCE

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the question of how adolescence gets represented in a variety of genres, including young adult and children's literature; novels, plays and poetry aimed at adults that take adolescence as a theme; films and television programs; scientific, journalistic, or autobiographical commentaries on the nature of adolescence; and so on. This is one of the core courses for the children's literature certificate program, but all interested students are welcome.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0670 - QUEER AND TRANSGENDER LITERATURE

Minimum Credits: 3
Maximum Credits: 3
"Queer and Transgender Literature" will examine the changing relationship between queer and transgender identities in literature, science and culture from the early twentieth century to the present. Students will learn to read literature in its historical context, pairing it with primary sources from relevant scientific and medical discourses, as well as locating it in competing literary criticism traditions in queer theory and transgender studies. The weekly course meetings will revolve around discussion of key works in queer and transgender literature, paired alternately with important literary criticism and primary sources. Classroom discussion and in-class writing assignments will focus on building these historicist and critical skills in sequence, so as to prepare students for their main assignment sequence, which asks them to apply the skills they are learning to generate their own contributions to debates in criticism about the proper boundaries between queer and transgender identities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGLIT 0699 - LITERATURE AND SCIENCE LAB

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: ENGLIT 0612

ENGLIT 0700 - WITNESSING REVOLUTIONS

Minimum Credits: 3
Maximum Credits: 3
What role did a series of Facebook posts and tweets play in the Arab spring? When do a network of uncoordinated uprisings become a political force? How does individual protest gain world-changing power? How do revolutions happen? This course will examine fiction and nonfiction works that narrate revolutions, interpret their causes, and organize their events. We will pay special attention to the role of writing in witnessing and shaping events.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

ENGLIT 0702 - INTRODUCTION TO GAME STUDIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0710 - CONTEMPORARY ENVIRONMENTAL LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course examines the ways in which contemporary writers in English have engaged with the natural environment. We will read a range of

authors, from the 1960s to the present day, to consider how they have looked critically at the human effects on ecosystems, and we will also study the interdisciplinary scholarly field of ecocriticism and its responses to such writings. Throughout, we will be attentive both to the literary qualities of writings about the environment and to their historical and political contexts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0712 - CRITICAL MAKING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0715 - AUSTEN AND BRONTE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

ENGLIT 0720 - GLOBAL FICTIONS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0725 - INTRODUCTION TO TRANSLATION STUDIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0730 - ARCHIVAL RESEARCH METHODS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 0800 - WEATHER, CLIMATE, LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGLIT 0812 - MEDIA/ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
From the late twentieth century to the present, ecology as a scientific discipline and set of cultural narratives has risen to the forefront of knowledge production as a way to study and understand complex biological systems, their environments, and their internal dynamics. During the same period, media systems have grown exponentially in complexity until they too have begun to exhibit some of the behaviors of ecological systems, including self-organization, feedback, evolution, and emergent properties. The term "media ecology" captures both this new, nonlinear systems approach to understanding media itself as well as the intersection between natural ecosystems and the technological assemblages with which they are intertwined. This course will explore both media that interface with natural ecosystems and works that engage contemporary media systems at different scales. The secret life of information, contagious media, and the post-natural ecologies of our present and future will challenge us to conceive of Media and Ecology as a single coupled system: the emblem of our contemporary environment. Students will have the option to produce collaborative media projects that explore the themes of the course. These can take the form of simulations, games, network graphing, film or video projects, local ecosystem analysis and/or visualization, or the mapping and analysis of a media ecosystem that interfaces with the environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 0815 - IRISH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1000 - INTRO TO TRANSLATION STUDIES

Minimum Credits: 3
Maximum Credits: 3
This class introduces students to translation studies, an emerging discipline critical to an understanding of world literature. The focus is on English versions of literary texts in other languages and the theory underlying the transformation. The course examines translation as a form of writing which possesses a complex relationship to an earlier text to which it is similar but not equivalent. Students will consider the ways in which talented translators render influential literary works. We grapple with the following questions: how do English translations of the same text differ and what is the result? How does one evaluate a translation?
Academic Career: UGRD
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1001 - INTERACTIVE LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1002 - GAME, STORY, PLAY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

ENGLIT 1005 - LITERATURE AND THE ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
This course examines the ways in which writers in English have engaged with the natural environment. We will read a range of authors, across time periods and up to the present day, to consider how they have looked critically at the human effects on ecosystems, and we will also study the interdisciplinary scholarly field of ecocriticism and its responses to such writings. Throughout, we will be attentive both to the literary qualities of writings about the environment and to their historical and political contexts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1009 - J.R.R. TOLKIEN AND COUNTERCULTURE

Minimum Credits: 3
Maximum Credits: 3
This course studies the persona, work, and critical and popular reception of J.R.R. Tolkien (1892-1973) from his initial publication of The Hobbit in 1937 through today. In the 1960s and '70s, people were scribbling "Frodo Lives" on subway walls and getting married dressed like Aragorn and Arwen. Less than half a century later, The Lord of the Rings repeatedly beat out the Bible as "best-loved" book in British polls, and Peter Jackson's adaptations made history both for their box-office earnings and for their groundbreaking contributions to film-making. Widely recognized as the father of modern fantasy and touted as the "Author of the [Twentieth] Century" by scholars, Tolkien continues to exert a panoramic influence on culture, particularly in his ability to speak to and for the marginalized. From Comic Con to Elder Scrolls to Game of Thrones, his sub-creation of Middle-earth embodies and fuels "nerd" culture now just as it did for the hippies of the previous century. Yet, Tolkien " war veteran, Oxford professor of Medieval languages and literature, devout Catholic " was a man of his time and quite conservative, at least publicly. While he famously said that his wife "should be satisfied by devotion to her children" and not "enter the intellectual side of life," the female characters in his stories, while small in number, are arguably great in power, assertiveness, and heroism. Tolkien's writing argues for the importance of a community where all cultures coexist: Elves, Dwarfs, Men, Hobbits go to war against Sauron and the "One Ring" designed to "rule them all." In this course we will read Tolkien's major works, The Hobbit and The Lord of the Rings in their entirety, as well as excerpts from what he considered to be his master work, The Silmarillion. We will explore Tolkien materials housed in Special Collections at Hillman Library and online. Our reading list will include reviews and scholarship on Tolkien's life and work, as well as on the ways in which his mythology continues to resonate and be reimagined in the twenty-first century. Ultimately, we will analyze the relationship between Tolkien and the counterculture as a way of understanding the ways in which myth, fantasy, and literature more broadly represent, shape, and interrogate complex social and political systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)

ENGLIT 1010 - MAGICAL NATURE BEFORE THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1011 - MILTON TO MINECRAFT: ART, NATURE, AND TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
In this course, we will examine literature pertaining to the long history of relations among humans, technical devices, and the natural world, situating

changing views of nature within larger cosmic and socioeconomic contexts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGLIT 1020 - HISTORY OF LITERARY CRITICISM

Minimum Credits: 3
Maximum Credits: 3
This course considers influential critical theorists ranging from Plato and Augustine to Nietzsche and Freud. Neither the readings nor the approach of the class fall under the narroWest definitions of literary criticism; our focus instead will be on texts from several disciplines that offer powerful models of reading and writing and that raise interesting questions about the foundations of literature, culture, and interpretation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1028 - LITERATURE AND PSYCHOANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to psychoanalytic contributions to understanding the processes of artistic creation and aesthetic response. It demonstrates how familiarity with psychoanalytic methodology enhances the alertness, subtlety and power in reading literary texts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1100 - MEDIEVAL IMAGINATION

Minimum Credits: 3
Maximum Credits: 3
This course explores some of the ways people in the middle ages saw the world around them. We will try to understand those perceptions by reading a variety of literary works, by comparing those works to other art forms and by examining similar kinds of experience in the modern world.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1101 - INVENTION OF ENGLISH

Minimum Credits: 3
Maximum Credits: 3
The English language and its literatures are in constant flux, but this was especially true in medieval england as waves of foreign invaders and immigrants shaped the language, and political, religious, and mercantile contact with other regions of Europe contributed new aesthetic and poetic ideals. Beginning with old English riddles, this course helps you discover the linguistic and literary DNA of English. You will discover the multiple "Englishes" and other languages that remain present in modern English and prefigure the global diversity of the anglophone world. Along the way, you will develop familiarity with old English and multiple dialects of middle English. You will begin to chart the continuities and ruptures involved in the transitions from tribal heroic culture to a growing sense of common identity as English people of an English kingdom. And on a parallel trajectory, you will track how the notion of a specifically English literature written by the English, in English, for the English, emerges from adaptations and negotiations with other European vernaculars. This focus forms a bridge to further study in early modern or Renaissance English literature. The tools of philology, historical language study, rhetorical analysis, and manuscript studies, lend themselves to this course's emphasis on language and history, and in developing facility with them, you will be better prepared for the study of any area of literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1103 - INTRODUCTION TO OLD ENGLISH

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to learn the fundamentals of old English as quickly as possible, in order to be able to read some of the very best old English poetry by the end of the term. While the course is not linguistically oriented, it can serve as a background to courses in middle English or old Norse, as well as leading to further study in old English literature.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1115 - CHAUCER

Minimum Credits: 3
Maximum Credits: 3
This course closely examines major works by Chaucer--the Canterbury tales and Troilus and Cressida. Though most of the reading will be in modern English translations, some will be in the original middle English. We will view Chaucer's work in its historical, social, artistic and intellectual contexts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1125 - MASTERPIECES OF RENAISSANCE LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course studies prose, poetry and drama written in England between 1550 and 1660--an age of religious reformation, economic and social instability, intellectual revision and political revolution. It seeks to make sense of the renaissance in terms appropriate both to that time and to our own.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ENGLIT 1126 - ADVANCED SHAKESPEARE

Minimum Credits: 3
Maximum Credits: 3
This upper level course in Shakespeare assumes some prior work with his writings. It seeks to develop a more detailed appreciation of his writing by examining selected texts in relation to some historical, cultural or critical issue.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1127 - SHAKESPEARE ON FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines how Shakespeare's works have been adapted to film and television. In this study, we will be concerned with Shakespeare as a cultural icon and with the expectations surrounding both high art and popular entertainment. Central to this examination are the relationships between a film and a text.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1128 - SHAKESPEARE'S SEXUALITIES

Minimum Credits: 3
Maximum Credits: 3

This course explores the roles of shakespeare's female characters as they relate to cultural ideas about gender and sexuality. We will examine beliefs about "proper" behavior of both women and men and the relationship of representations of gender to social power.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1135 - LITERATURE, MEDIA, AND SCIENCE IN THE AGE OF SHAKESPEARE

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the broad range of styles, genres, and concerns of literature written in English in the early modern period, particularly the 17th century. The designation "early modern" is capacious enough to straddle the renaissance as well as the early enlightenment. Readings could include English writers, writers from the Americas, and writers who composed in English but wrote about countries other than England, Ireland or new England.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ENGLIT 1142 - ANCIENT EPIC

Minimum Credits: 3
Maximum Credits: 3
Study of selected Greek and Roman epics in English translation. Among the works that may be read are Homer's Iliad and Odyssey, Apollonius' Argonautica, Virgil's Aeneid, and Ovid's metamorphoses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGLIT 1150 - ENLIGHTENMENT TO REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course focuses on literature and culture of the late 17th and 18th centuries--a period of revolutionary changes in the way writers and readers viewed their world. We will read widely in the important texts of the period in order to explore the interplay of enlightenment and revolution.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ENGLIT 1170 - ROMANTIC NATURE

Minimum Credits: 3
Maximum Credits: 3
This course concentrates on writings from 1790 through the 1830's that have come to be associated with romanticism. It explores the social, intellectual and aesthetic concerns of this movement and its relationships with its British and European cultural contexts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ENGLIT 1175 - 19TH CENTURY BRITISH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
A study of the major writers and cultural issues of 19th century Britain situated in relation to the social and intellectual developments of the time.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ENGLIT 1180 - HUMANS, ANIMALS, MACHINES IN VICTORIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course studies the poetry and prose produced during the reign of queen Victoria, and places these works in relation to changing practices of science, industry, empire and culture.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1181 - VICTORIAN NOVEL

Minimum Credits: 3
Maximum Credits: 3
This course will analyze the emergence and development of the victorian novel--careful reading and focused discussion of such writers as Dickens, Eliot, Trollope, Thackeray, Hardy and Meredith will attempt to define the social, moral, and political concerns of their work as well as their narrative technique.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1199 - TOPICS IN BRITISH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Explores thematic, formal, historical or cultural topics in British literature. It ties these issues to critical and social concerns in the development of British literature and culture.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1200 - AMERICAN LITERATURE TO 1860

Minimum Credits: 3
Maximum Credits: 3
This course surveys literature produced in America before the Civil War. In the process it explores the historical, political, social and cultural factors that affected the development of that literature. It examines the work of writers who saw themselves as powerful framers of the national experience yet fearful they would have little effects on a culture confronting problems of slavery, divisiveness, literacy, economic change, immigration, etc.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1201 - DIGITAL NARRATIVE AND INTERACTIVE DESIGN

Minimum Credits: 3
Maximum Credits: 3
How are computational artifacts currently designed, and how can they be designed differently? What stories can be told by collaborating with computers? What stories can't be told? This project-based course will enable students to engage with and create computational narratives and interactive projects with data, hardware and algorithms. Each collaboratively taught iteration of the course will include 3-4 of these units, such as: fabrication, interactive hardware, computational narrative, interactive data, and prototyping. Students will consider what it means to compose with computers for human audiences, and with humans for computer audiences. Designed for Digital Narrative and Interactive Design (DNID) majors to take midway through the major, it will help students consolidate the interdisciplinary knowledge they have obtained in their prerequisite courses, introduce them to examples of interdisciplinary work that will inform their later capstone projects, and give them practice in working on collaborative

projects that span the humanities and information/computing fields.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0425, OR HAA 0425, OR ENGLIT 0512 AND CS 0010, OR CS 0011, OR CS 0012, OR INFSCI 0419

ENGLIT 1210 - THE AMERICAN RENAISSANCE

Minimum Credits: 3
Maximum Credits: 3
This course surveys the flowering of American literature during the first half of the nineteenth-century. It analyzes the struggle of American writers to develop a new national literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

ENGLIT 1220 - CIVIL WAR TO WORLD WAR 1 IN AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
An examination of changing literary practices from the civil war to the beginning of World War I. The course explores the interactions of economic and social developments on American culture.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1225 - 19TH CENTURY AFRICAN AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will cover a wide range of materials, beginning with the late eighteenth-century poetry and prose of authors such as Phillis Wheatley and Olaudah Equiano and ending with Civil War, reconstruction, or gilded-age authors such as William wells brown, Frances Harper, Pauline Hopkins, or Paul Laurence Dunbar. Readings will include a variety of different genres of writing (slave narratives, poetry, drama, fictive and non-fictive prose) as well as pay passing attention to the significant African American intellectual and cultural movements that had a role in shaping these various literary productions.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1227 - HARLEM RENAISSANCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1230 - 20TH CENTURY AFRICAN AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
The first half of this course begins by examining some of the major authors from the 1920s who were a part of what came to be known as the 'new negro renaissance' or 'Harlem renaissance,' such as Langston Hughes, Nella Larsen, Countee Cullen, Claude McKay, and Zora Neale Hurston. We will then study a range of modernist and naturalist writers of the 1930s and 1940s, such as Richard Wright, Ann Petry, and Gwendolyn Brooks. In the second half of the course we will focus on several post-WWII writers that were associated with the civil rights and black arts movements, from the

1950s to the 1970s, including such figures as Ralph Ellison, James Baldwin, and Toni cade Bambara. Finally, we will consider the recent wave of African American writers that emerged with the popularization, in the 1980s, of several new genres of African American literature.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1247 - AUGUST WILSON

Minimum Credits: 3
Maximum Credits: 3
This course closely examines the work of the American dramatist august wilson. A significant amount of the playwright's work, including his epic 10-play 'Pittsburgh Cycle,' is set in Pittsburgh and notably in the hill district, where wilson spent his first 33 years. The course will engage with Wilson's plays as well as criticism, history and literature by other authors. Course goals include increased insight and skill in reading, in close analysis, and in discussing and writing about this imaginative world in its historic, social, and literary contexts. Assignments may include viewing plays and videos, researching Pittsburgh history, and field trips to the hill district.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1258 - ISRAELI AND PALESTINIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1261 - SPECULATIVE FICTION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1262 - AFRICAN AMERICAN SCIENCE FICTION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements

ENGLIT 1272 - THE ROARING 20'S: FROM FARMERS TO FACTORY WORKERS, FROM FLAPPERS TO FINANCIERS

Minimum Credits: 3
Maximum Credits: 3
A reading of influential literary texts from the American 1920's. The course explores changing literary techniques in relation to new views of the past, war, youth, class, politics, etc.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

ENGLIT 1280 - CNTMPRY AMERICAN WOMEN WRITERS

Minimum Credits: 3
Maximum Credits: 3
This course examines writings by American women from the 1950's to the present. It draws upon feminist literary criticism to explore issues such as the symbolic significance of gender, power relations between the sexes, and differences in representation across race, class and ethnicity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

ENGLIT 1305 - GREAT BOOKS 1

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ENGLIT 1306 - GREAT BOOKS 2

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ENGLIT 1325 - MODERNISM

Minimum Credits: 3
Maximum Credits: 3
This course examines major works in the modernist tradition poetry, fiction, drama--to determine the role these texts have played in creating the world that seems so familiar to us now.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

ENGLIT 1345 - DOCUPOETRY

Minimum Credits: 3
Maximum Credits: 3
Docupoetry (also known as investigative poetry, creative nonpoetry, research-based poetry) is a form of creative writing that relies on a considerable amount of research. To explore various topics or issues, and to pursue new ways of knowing, poets incorporate historical documents, visual artifacts, scientific data, and other materials. The poems that emerge from the process are artistically and intellectually daring, as they interact with other genres (such as essay, memoir, testimony, reportage) and disciplines (history, ethnography, philosophy, geology, environmental science, among others). In this course students will gain familiarity with major forerunners of the practice and examine a diverse set of contemporary examples. In addition, they will spend most of the semester designing and developing their own research-based poems. Previous creative writing experience is welcome but not necessary. Workshop opportunities and instructor feedback will be provided.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1350 - POSTMODERN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1355 - VIRTUAL REALITY

Minimum Credits: 3
Maximum Credits: 3
Can there be more than one reality? Is there even one? What relationship do the senses and the mind bear to the physical environment? From the dawn of human society, no topic has been more fiercely debated than the nature of reality. In narrative, philosophy, and media, virtual reality has always been with us. This course dives deep into the rabbit hole of the real and the virtual, an adventure that includes philosophy, literature, film, and, of course, VR headsets aplenty! In addition to exploring the history of the real and the virtual, we will consider the relationship of virtual reality to the body, to space, to human gesture and communication, and to code. We will also explore the role of the imagination and creativity in the generation of new worlds. You will learn to think historically, theoretically, and critically about VR. You will have the option of either writing critical papers or creating your own virtual environment or game as your final project. This course assumes no prior experience with VR or coding, but those skills can optionally be put to use in final projects. Come prepared to question your reality!
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1360 - TOPICS IN 20TH CENTURY LIT

Minimum Credits: 3
Maximum Credits: 3
Considers thematic, formal historical or cultural topics in late 19th and 20th century literature. It ties these issues to critical and social concerns in international modernism and post modernism.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1380 - WORLD LITERATURE IN ENGLISH

Minimum Credits: 3
Maximum Credits: 3
This course examines contemporary literature, primarily in English, written in eastern Europe, Africa, Latin America, etc. It pays particular attention to its depiction of social, political and moral concerns.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1382 - PRIZED BOOKS

Minimum Credits: 3
Maximum Credits: 3
How do metropolitan taste and recognition affect dominant and emergent literatures and nations? How do particular contexts and award-winning texts exert pressure on existing criteria and values? How does the category "prized books" also implicitly constitute and comment upon a body of literature that is "unprized"? How do prized books redefine notions of readership and citizenship in the world of globalization and electronic access? Such questions will open up the idea of "world literature" not as an afterthought to the canon of "English" literature, but as an integral and definitive part of it. Students will read literature, speeches, and essays by winners of the nobel and other global literary prizes such as the booker and the commonwealth.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: MIN CUM GPA: 3.25
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ENGLIT 1384 - BANNED BOOKS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1406 - U.S. LATINX LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will focus on U.S. Latino literature. While Mexican-Americans have roots in North America that go back to colonial times, the Latino explosion has happened mainly in the last thirty years, giving rise to new processes and forms of cultural expression, including an emerging literature that is neither a subset of U.S. Literature nor an ex tension of modern Latin American literature, though it has connections to both. To get an idea of what this literature involves and where it is going, we will look at some representative novels, poetry, memoirs, plays and films.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1412 - SECRET PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
How much do you know about the city outside Pitt? Have you explored a hillside neighborhood using stairways instead of streets? Visited the church with the largest collection of relics outside Europe? Eaten a macaroon prepared by a transplanted French baker? Pittsburgh has a rich cultural history, from labor disputes to a vibrant arts scene. It's also a city with secrets. Students in this course will explore Pittsburgh's most unusual sites and locales; learn about the city's history and the literature it has inspired; and research and write entries for a public guide to secret Pittsburgh.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1413 - HUMANITIES IN THE CITY

Minimum Credits: 3
Maximum Credits: 3
This course will explore the way the arts and humanities work through institutions (museums, journals, cultural organizations, etc.) to shape Pittsburgh. Each week, students will engage with people and institutions- such as City of Asylum, the Center for PostNatural History, and the Andy Warhol Museum - that contribute to Pittsburgh's cultural landscape. Readings and discussions will encourage students to think about the contributions that various institutions make to the city, as well as broader connections between the humanities and public concerns such as housing, transportation, diversity, and social justice. Through discussions and assignments (see Student Responsibilities, below), the course aims to help students achieve a deeper understanding of the city and inspire them to be active forces in shaping their surroundings by engaging with the arts and humanities in institutional settings.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1510 - KAFKA AND THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1552 - HISTORY OF THE ENGLISH LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
A survey of the linguistic development of English from Anglo-Saxon times to the present. Attention given to basic linguistic structures and discursive practices and to the social and historical conditions under which they change.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1600 - COMPUTATIONAL METHODS IN THE HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the use of computational modeling and programming to conduct text-based research in the humanities. The goals of this course are to learn how to identify research questions in the humanities that are amenable to computational analysis and processing, along with designing and implementing xml-based computational systems to explore those questions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

ENGLIT 1611 - DEVELOPMENT OF THE NOVEL

Minimum Credits: 3
Maximum Credits: 3
This course studies the development of the novel as a literary practice. Readings will reveal significant contributions to the definition of the novel; the characteristics that identify the novel, historical developments that led to its creation, and its dominant subjects.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1635 - CHILDREN IN PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1640 - LITERATURE FOR CHILDREN

Minimum Credits: 3
Maximum Credits: 3
This course examines literature that has been and is being read by children. There are units on fairy tales, myths and legends, poetry and fiction as well as more "realistic" fiction. The approach is historical, critical and creative.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGLIT 1645 - CRITL APPRCH TO CHILDREN'S LIT

Minimum Credits: 3
Maximum Credits: 3
This course examines a variety of children's books from a number of theoretical perspectives; historical, feminist, transactional, structuralist, etc. The implications of theory will be emphasized. We will place children's books and reading in the wider context of the emotional, cognitive, and moral development of the child, the popular culture of childhood, and contemporary multicultural society.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: ENGLIT 0560 and 0562 or 0655
Course Attributes: Childrens Literature, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1647 - LITERATURE FOR ADOLESCENTS

Minimum Credits: 3
Maximum Credits: 3
This course will read classics as well as modern works written specifically for an adolescent audience. We will also read and discuss sociological and psychological constructions of adolescents and books on pedagogy.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1701 - TOPICS IN WOMEN'S STUDIES

Minimum Credits: 3
Maximum Credits: 3
Investigates issues raised by the woman's movement in literature written by and about women. It ties these issues to critical and cultural concerns both at the time the text was written and to the present day.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1704 - WOMEN NOVELISTS

Minimum Credits: 3
Maximum Credits: 3
This course explores the important role women have played in the development of the novel and how they have used and transformed its generic traditions. We will place novels in the contexts of issues important to their own time and discuss questions raised by recent feminist criticism.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1705 - WOMEN AND DRAMA

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the work of playwrights who came of age during the feminist movement in the 1970s and won critical and /or popular acclaim. Students will choose one of the playwrights to research for a class presentation and term paper.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

ENGLIT 1715 - GLOBAL BLACK LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Despite their geographical and cultural differences, writers from Africa, the Caribbean, and the United States undergo similar experiences of oppression. Problems of self-identity, and the quest for self-respect. These similarities will be discussed in class along with a comparative approach to the texts with supplementary films, slides, and recordings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Latin American Studies

ENGLIT 1719 - INTRO TO HOLOCAUST LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course surveys the central texts of the literature of the holocaust, while introducing students to the main issues and preoccupations of holocaust

testimony in literature and film.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1730 - CHINESE AND WESTERN POETRY

Minimum Credits: 3
Maximum Credits: 3
A comparative study of Chinese and Western lyric poetry. This course explores the world of feeling as expressed in the poetry of two vastly different worlds: china and the West and focuses on the language of feeling in a poetic medium. The purpose of this course is to appreciate how differences between the two poetic traditions is essential to a better understanding of the two cultures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ENGLIT 1738 - IRISH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course samples the work of major figures in Irish literature. It seeks to define its national character through careful reading of selected texts.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

ENGLIT 1756 - BALLADS AND BLUES

Minimum Credits: 3
Maximum Credits: 3
This course acquaints students with folk and literary aspects of ballads and blues in the Anglo-American and Afro-American traditions. It surveys both forms from their separate beginnings to contemporary examples. Organized both historically and topically, the course explores influences on these forms as well as their historical, social and cultural context.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGLIT 1760 - TOPICS IN POPULAR CULTURE

Minimum Credits: 3
Maximum Credits: 3
Focuses on the emergence of popular culture, the relationship of modern social and economic practices, mass audiences, and modes of cultural representation, or specific popular forms.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

ENGLIT 1797 - BIBLE AS LITERATURE 2

Minimum Credits: 3
Maximum Credits: 3
This course continues the bible as literature and it provides an opportunity to consider more carefully books read in the earlier course as well as to consider other books that were entirely neglected. This second semester will permit us to address some fascinating problems; what happens to narratives as they pass from an oral tradition to written form; problems of translation; the formation of a canon; the ways the bible influences later literature. The generally historical approach will permit the student to understand the time and culture of the bible.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGLIT 1900 - PROJECT SEMINAR

Minimum Credits: 3
Maximum Credits: 3
The junior seminar, required for English literature majors, offered in varied versions, will investigate methods and goals of literary historical study by directing attention to broad historical and theoretical issues and to long-durational developments and transformations of literacy cultural practices. Will include a range of literary, theoretical and historical texts selected to enable exploration of issues and problems that cut across traditional designations of literary historical periods.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, West European Studies, Writing Requirement Course

ENGLIT 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
This option permits students to design their own course with the approval of a department faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGLIT 1903 - DIRECTED RESEARCH IN LITERATURE

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

ENGLIT 1904 - UTA IN LITERATURE

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGLIT 1907 - LITERATURE INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

ENGLIT 1910 - SENIOR SEMINAR

Minimum Credits: 3
Maximum Credits: 3
Intensive study of a single topic or figure that assumes previous work in related literary historical and critical areas. Each seminar moves toward a final paper that integrates earlier literary study with the specific critical perspective developed in this course.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or

ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Requirement Course

ENGLIT 1913 - ADVANCED RESEARCH IN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Working closely with faculty members on her/his senior thesis committee to do the primary reading, foundational research, and exploratory writing for the senior thesis, the student will read a majority of the primary literary works and a significant amount of criticism and complete a minimum of 20 pages of exploratory writing or a draft of the thesis.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

ENGLIT 1914 - SENIOR HONORS THESIS

Minimum Credits: 3
Maximum Credits: 3
In this course, the student will complete all remaining research for the senior thesis and will work closely with the faculty members on his/her committee to plan, write, and revise the senior thesis.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

ENGLIT 1925 - UNDERGRAD TEACHING IN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Students enrolled in this course will work with an instructor as an assistant to any upper-level course being offered to English majors. They will help with course materials and generate class discussion.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

English Writing

ENGWRT 0400 - INTRODUCTION TO CREATIVE WRITING

Minimum Credits: 3
Maximum Credits: 3
This course offers the opportunity to experiment with forms of poetry and fiction and to read and discuss from a writer's point of view contemporary writing in these genres.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGWRT 0411 - INTRODUCTION TO CREATIVE NONFICTION

Minimum Credits: 3
Maximum Credits: 3
This course will introduce undergraduates to creative nonfiction, a genre that often borrows from fiction writer's techniques while sticking to the facts. Genre includes personal essay, new journalism, memoir and quality feature writing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102) or ENGR 0012

ENGWRT 0520 - INTRODUCTION TO FICTION WRITING

Minimum Credits: 3
Maximum Credits: 3
This first course in the fiction sequence introduces students to aspects of prose fiction--plot, point of view, characterization, conflict, etc. Students may write exercises on these aspects of fiction, write one or more short stories and revise frequently. Students will also read representative stories and explore their use of particular fictional techniques.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 0530 - INTRODUCTION TO POETRY WRITING

Minimum Credits: 3
Maximum Credits: 3
Through writing exercises, analysis of modern and contemporary poetry and frequent revision of their own poetry, students learn the basic elements of poetry writing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ENGWRT 0540 - WRITING YOUTH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will introduce undergraduates to the art of writing for young people. It may focus on a single genre in depth (for instance, the young adult novel) or invite students to read and write broadly across a range of genres (picture books, children's poetry, nonfiction for the young, etc.). This course serves as an approved category 1 elective for the children's literature certificate program, but all interested students are welcome.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGCMP 0200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102) or (ENGR 0012 or 0712 or 0715 or 0716 or 0718)

ENGWRT 0550 - FUNDAMENTALS OF NEWS REPORTING

Minimum Credits: 3
Maximum Credits: 3
The internet has led newspapers, corporations and non-profit agencies to create websites that dispense news and information 24 hours a day, seven days a week, and these agencies need people who can write efficiently in that style. This makes clear, concise, accurate writing - the basis of all news reporting - more important than ever. In fundamentals of news reporting, students will learn to identify news, write effective summaries of the information, structure stories well, conduct research, and identify sources of reliable facts and informed opinions. Students will write about their surrounding communities: the University, Oakland, the city of Pittsburgh. The course will also include lectures and discussions about media law and ethics.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Writing Requirement Course

ENGWRT 0560 - SCREENWRITING AND NARRATIVE

Minimum Credits: 3
Maximum Credits: 3
This course will explore developing character-based stories in the screenplay form. Students will be exposed to a variety of readings including original screenplays, related prose, and texts which reinforce basic tenets of good story telling. Students will write rigorously building from idea to outline with great attention to structure and character development. Students will develop writing abilities, critical facilities in approaching work, and an understanding of principles of storytelling common in narrative forms.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) or (ENGR 0012 or 0712 or 0715 or 0718)
Course Attributes: Writing Intensive Course (WRIT)

ENGWRT 0610 - INTRODUCTION TO JOURNALISM AND NONFICTION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to develop your skills as a nonfiction writer. Through a combination of required readings, creative exercises, peer critiques and critical discussions, you will develop an understanding of the fundamentals of journalism as well as an introduction to the wide-ranging possibilities of nonfiction writing as a genre: narrative long form, the personal essay, immersion journalism and forms of creative nonfiction. This class will be divided into two components; gathering information and shaping stories.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 0650 - READINGS IN JOURNALISM

Minimum Credits: 3
Maximum Credits: 3
This course is intended to introduce journalism students to news, feature, and column/op-ed writing as practiced by the best papers - and the best writers - nationally. The course will focus on the methods for obtaining the information needed to create solid news stories, and strategies ranging from extensive, in-depth interviewing, background reading, and the journalistic "legwork" and "digging" that produces incisive, accurate accounts and the very best "investigative reporting".
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 0710 - INTRO TO AUDIO STORYTELLING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1010 - INTERMEDIATE FICTION

Minimum Credits: 3
Maximum Credits: 3
Students work on writing short stories and read a wide range of stories. Students can expect to revise their work regularly. Class sessions will address problems in fiction writing -- from plot to characterization, from point-of-view to style.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520; MIN GRADE: 'C'

ENGWRT 1050 - The Lyric Essay

Minimum Credits: 3
Maximum Credits: 3
In this class, students will be invited to experiment with the boundaries between nonfiction, fiction, and poetry. They will read and write a wide variety of Lyric Essays-including mosaics, prose poems, and double-portraits¿as well as compose a short audio monologue.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGWRT 1090 - MASTERING POINT OF VIEW

Minimum Credits: 3
Maximum Credits: 3
This course acquaints the student with a variety of first and third person points of view. Through readings, class discussions and written work, students develop a mastery of the internal monologue, dramatic monologue, letter, diary and other forms.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520 or 0530 or 0550 or 0610

ENGWRT 1091 - AUTOBIOGRAPHY AND CREATIVE IMPULSE

Minimum Credits: 3
Maximum Credits: 3
This advanced level, mixed-genre course will explore various ways autobiographical material might be generated, structured, modified, and revised. In addition to frequent in-class writing and a final project, students will read and respond to published essays, poetry, and fiction.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520 or 0530 or 0550 or 0610

ENGWRT 1092 - WRITER'S JOURNALS

Minimum Credits: 3
Maximum Credits: 3
This course studies the journal as an art form. It also questions the purpose and value of journal keeping for a writer.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520 or 0530 or 0550 or 0610

ENGWRT 1094 - READINGS IN CONTEMPORARY FICTION

Minimum Credits: 3
Maximum Credits: 3
This course acquaints students with a variety of contemporary writers. This study helps students raise questions about their own developing aesthetics as they are reflected in form and take into account their dual roles as creative writers and critics.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520

ENGWRT 1095 - TOPICS IN FICTION

Minimum Credits: 3
Maximum Credits: 3
This course concerns itself with matters of interest in fiction writing; form and technique, contemporary production, and the relation of the fiction writer to his/her society.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1097 - TOPICS IN FICTION

Minimum Credits: 1
Maximum Credits: 1
This course concerns itself with matters of interest in fiction writing; form and technique, contemporary production, and the relation of the fiction writer to his/her society.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1098 - THE CONTEMPORARY BESTSELLER

Minimum Credits: 3
Maximum Credits: 3
Students will read books in a variety of genres that have all appeared on the New York Times' bestseller list. We will examine the elements of craft that play a role in making a book a bestseller, such as suspense, characterization, world-building, and plot. A series of assignments will allow students to put these elements into practice in their own writing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1101 - SENTENCE SHOP: EXPERIMENTS IN TIME AND SPACE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGWRT 1132 - ELEMENTS OF SCREENWRITING

Minimum Credits: 3
Maximum Credits: 3
This course will explore developing character-based stories in the screenplay form. Students will be exposed to a variety of readings, including original screenplays, related prose, and texts which reinforce basic tenets of good story telling. Students will write a completed 1st Act for a 3 to 5 part screenplay, building from idea to outline with particular attention to structure and character development.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1133 - INTERMEDIATE SCREENWRITING

Minimum Credits: 3
Maximum Credits: 3
This advanced course will help you develop your feature film idea into a full treatment. Weekly discussions and writing assignments focus on creating the plot, scene, sequences, setting, and subplots. By the end of the semester, you will have completed a scene-by-scene treatment of your original work. Considerable outside work is required. Grading is based on weekly assignments, the quality of the written treatment and class participation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1200 - WRITING THE CITY

Minimum Credits: 3
Maximum Credits: 3
The course's goal is to encourage your personal recording of experiences through which you gain insight and self-discovery. Journal entries reflect the significance of travel experiences that others can share and expand. Travel narratives and oral presentations are evaluated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGWRT 1210 - POETRY WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
For this advanced poetry writing course, the central text will be the student's own writing. Students will read recently published poetry, regularly write their own poetry and frequently rewrite it.

Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0530; MIN GRADE: 'C'

ENGWRT 1245 - STUDIO IN AFRICAN-AMERICAN POETRY AND POETICS

Minimum Credits: 3
Maximum Credits: 3
Intended for graduate students and advanced undergraduates, Studio in African American Poetry and Poetics will be a course in interdisciplinary making, as we investigate the evolving fields of African American poetry and poetics through a critical and a creative lens.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0400 or ENGWRT 0530 or ENGLIT 0315 or ENGLIT 0515
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

ENGWRT 1290 - READINGS IN CONTEMPORARY POETRY

Minimum Credits: 3
Maximum Credits: 3
This course focuses on American poets who have come to prominence since 1963. We will read widely in the poetry of this period to understand its unique contribution to the development of poetic form and its relationship to the culture that produced it.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0530; ; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)

ENGWRT 1310 - NEWSPAPER 1

Minimum Credits: 3
Maximum Credits: 3
Students in this course learn how to profile individuals, report trends, take polls and write about a community. The course provides hands-on practice in feature writing and a workshop approach to critiquing students' and professionals' work.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0550; MIN GRADE: 'C'

ENGWRT 1330 - INTERMEDIATE NONFICTION: SCENE AND POINT-OF-VIEW

Minimum Credits: 3
Maximum Credits: 3
Students in this course will study, practice, produce and revise short pieces of literary nonfiction while examining basic structures of the essay, the profile, and long form narratives. We will study the anatomy of a scene and explore techniques of scene-by-scene construction. Students will be expected to master the basics of point-of-view, and to begin experimenting with voice. We will develop research techniques including the art of the interview and immersion research. This course will place emphasis on digital forms of publishing. Students will develop personal blogs. Workshopping of student work will be limited.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0550 or 0610; MIN GRADE: 'C'

ENGWRT 1350 - AUDIO JOURNALISM AND REPORTING

Minimum Credits: 3
Maximum Credits: 3
This course is designed for emerging journalists and reporters looking to explore their craft in audio form. Students will learn to produce interviews and reported audio stories, while gaining concrete skills necessary for finding work in the radio or podcasting industry. Through instructive lectures, craft-based discussions, and hands-on production activities, students will experiment with a variety of audio journalism genres, including news and

short features, using professional-grade recording equipment and editing software. You will learn to identify what makes for compelling sources and subjects and how to ethically and effectively navigate a range of interviewing and field reporting settings. We will cover stylistic conventions for scriptwriting and tracking narration and consider strategies for pitching story ideas to real-world media outlets. And you will fine-tune your ear for the craft through collaborative story edits and workshops, coming away with a portfolio of short reported stories, including at least one short broadcast-worthy feature.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0610

ENGWRT 1360 - THE ART OF THE INTERVIEW

Minimum Credits: 3
Maximum Credits: 3
In this course, we'll explore the interview as an essential tool for nonfiction storytelling across forms. We'll consider approaches to interviewing practice from across subfields and genres or example, print journalism, memoir, oral history, radio, and documentary film, and consider how different techniques yield different materials suited to a range of purposes and stories. What makes a good question tick? How can you get through to a challenging or resistant subject? What habits of mind and body can help you transform an answer into an image or an opinion into a story? Through focused case studies and discussions, you'll learn from the craft of master interviewers across fields. And through hands-on exercises, you'll gain experience planning, conducting, and making meaning from real-world interviews in a range of styles and contexts. You'll come away with a toolkit of adaptable skills and techniques to continue your work in the world, wherever you choose to take it.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0610

ENGWRT 1370 - JOURNALISM BOOT CAMP: WRITE NOW

Minimum Credits: 3
Maximum Credits: 3
The course is a journalism boot camp-like experience where students will work closely with the instructor and editors on the Pitt news to prepare for the real world of journalism.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1377 - MEDIA LITERACY: WRITING AND READING YOUR WAY THROUGH THE DIGITAL LANDSCAPE

Minimum Credits: 3
Maximum Credits: 3
This course will teach you how to be media literate and understand the role of media in a democracy. You will learn how to identify and verify news, and how to understand news gathering and sourcing. You will learn how to distinguish between the demands of real journalism as you do your own writing and the realities of the digital world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGWRT 1378 - WOMEN IN JOURNALISM

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENGWRT 1390 - READINGS IN CONTEMPORARY NON-FICTION

Minimum Credits: 3
Maximum Credits: 3
This course familiarizes students with a number of different forms of and approaches to contemporary non-fiction writing.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0550 or 0610

ENGWRT 1391 - WRITING THE REVIEW

Minimum Credits: 3
Maximum Credits: 3
This course explores various types and styles of reviews. Students read a variety of critics as well as write original reviews of film, television, theatre, music, books, etc.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ENGCMP 0004 or 0006 or 0020 or 0200 or 0203 or 205 or 207 or 208 or 0250) or (FP 0003 or 0006) or ENG 0102 or ENGR 0012

ENGWRT 1393 - SPORTS WRITING

Minimum Credits: 3
Maximum Credits: 3
The course affords students the opportunity of studying modern sports writing techniques, with an added goal of improving their writing skills. It deals with the differences between sports reporting and writing and news reporting and writing. Ideally, a student with an interest in sports writing will complete the course with an idea of how best to collect information, organize it and disseminate it in an appealing manner. Clear, entertaining prose will be stressed.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0550 or 0610

ENGWRT 1394 - SCIENCE WRITING

Minimum Credits: 3
Maximum Credits: 3
The emphasis of this introductory science writing course will be two fold: you will learn to find, read, assess, and interpret scholarly scientific writing; you'll also read books and articles that use creativity, imagination and poetic acuity to make scientific ideas clear to the lay reader. Through the deep study of pieces of science writing and the completion of a series of short exercises, you will gain the skills you need to write and revise feature-length articles.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ENGCMP 0004 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0250) or (FP 0003 or 0006) or ENG 0102 or ENGR 0012

ENGWRT 1399 - TOPICS IN NON-FICTION: NEWSPAPER

Minimum Credits: 3
Maximum Credits: 3
This course examines the history, lives and livelihoods famous female journalists who made exceptional contributions to journalism despite institutional and gender obstacles. Starting with the turn-of-the century, we look at women and their writing who covered domestic and international beats such as Nellie Bly, Martha Gellhorn, Gloria Steinem, and Lara Logan who have left their mark on women's history.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1403 - TOPICS IN NON-FICTION: ELECTRONIC MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course concerns itself with the varieties of writing for the electronic media, and with related matters of interest; form and technique, contemporary production, ethical and legal matters, and the general relation of the writer in this field to his/her society.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520 or 0530 or 0610

ENGWRT 1430 - LITERARY AND ONLINE PUBLISHING

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the art and craft of literary and online publishing. Students will research independent literary magazines and small presses, both online and in print. They will learn the basics of literary publishing from both an editorial and an authorial perspective. They will use what they learn to produce an online site featuring the work of Pitt-Greensburg writing program graduates, as well as individual print chapbook-length collections from the English writing program capstone.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520 or 0530 or 0610

ENGWRT 1435 - LITERARY PUBLISHING IN PRINT AND ONLINE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520 or 0530 or 0610

ENGWRT 1450 - AUDIO STORYTELLING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0400, or 0410, or 0520, or 0530, or 0610

ENGWRT 1451 - MULTIMEDIA ESSAY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0400 or 0410 or 0520 or 0530 or 0610

ENGWRT 1490 - LISTENING TO NARRATIVE AUDIO

Minimum Credits: 3
Maximum Credits: 3
With podcasts on the rise, audio is an increasingly vibrant platform for storytelling across genres, from narrative journalism, to the audio essay, to serial (non)fiction. What can we, as writers learn from close encounters with these forms? How can born-audio narratives help us approach questions of style, structure, scene, and voice in unexpected ways? And how can we take inspiration from these forms to reimagine the possibilities of our writing, whether it's for the ear or for the page? Just as a "Readings" course teaches you to read like a writer, in this course, you'll be challenged to listen like an audio producer, attuning yourself to the craft of audio stories in order to inform and enrich your own creative work. Throughout the semester, you'll produce focused responses to weekly listening assignments, engage in rigorous discussions on craft, and generate some of your own creative work in response to the stories we encounter. While no formal technical training in audio production will be provided or required, students interested in exploring their writing in audio forms will be encouraged to do so.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0520, ENGWRT 0610, OR ENGWRT 0710

ENGWRT 1501 - TOPICS IN CREATIVE WRITING

Minimum Credits: 3
Maximum Credits: 3
Topics in Creative Writing will explore writing that crosses boundaries in a variety of ways, between traditional genres (fiction, nonfiction, poetry, drama) or that is interdisciplinary (between writing and, for instance, studio arts, photography, music, or dance). Writers of all genres have been influenced, challenged, and enriched by other kinds of artists' productions and practices (and vice versa), and this class will examine those engagements and influences especially in but not limited to contemporary work.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1514 - WRITING AND MAKING COMICS

Minimum Credits: 3
Maximum Credits: 3
This course is designed as an introduction to making comics. The class will focus primarily on writing scripts: pitching, outlining, drafting, and editing. Students need not have skills as illustrators. However, students will gain a basic understanding of drawing comics, collaborating with artists, and comic layout and design.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

ENGWRT 1515 - THE BOOK AS ART: TEXT AND IMAGE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: Pre-requisite: ENGWRT 0520 or ENGWRT 0530 or ENGWRT 0610 (or instructor permission)

ENGWRT 1540 - WRITING YOUTH LITERATURE 2

Minimum Credits: 3
Maximum Credits: 3
Expanding on the fundamentals of writing youth literature, students will aim to complete the first draft of a novel-length piece for either a young adult or middle grade audience. Incoming students must have an approved idea and roughly sixty consecutive pages of writing already completed.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ENGWRT 1650 - PLAYWRITING 1

Minimum Credits: 3
Maximum Credits: 3
A beginning course in writing for the stage. Starting with short scenes, students will work towards understanding the craft and art of constructing theatre stories to be performed by actors. The final project will be a one-act play. Throughout there will be emphasis on the stage effectiveness of the writing and opportunity for informal performance of student scripts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

ENGWRT 1651 - PLAYWRITING 2

Minimum Credits: 3
Maximum Credits: 3
This is an advanced course in the study of playwriting. The goal is to create performable plays.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: THEA 1365 or ENGWRT 1650

ENGWRT 1710 - SENIOR SEMINAR IN FICTION

Minimum Credits: 3
Maximum Credits: 3
In this seminar students are expected to criticize student work intelligently and constructively. It is designed for students familiar with the craft of writing who wish to refine their writing skill and make their stories more subtle, original and meaningful. Analysis of student writing will be supplemented by the reading of professionally written stories.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 1010
Course Attributes: Capstone Course

ENGWRT 1730 - SENIOR SEMINAR IN POETRY

Minimum Credits: 3
Maximum Credits: 3
A fairly broad knowledge of 20th century poetry in English is assumed. Most class hours will be devoted to workshop critiques; a portion of class time will be spent discussing the work of younger contemporary poets.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 1210
Course Attributes: Capstone Course

ENGWRT 1750 - SENIOR SEMINAR IN NONFICTION

Minimum Credits: 3
Maximum Credits: 3
This is a workshop-intensive class in which students will work on one research-intensive piece of long form narrative nonfiction of about 8,000 words. This course will place heavy emphasis on digital forms of publishing. Students will maintain personal blogs and personal websites where they will publish their own work and participate in the editing and publishing of a class-wide digital magazine.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 1330
Course Attributes: Capstone Course

ENGWRT 1760 - ADVANCED REPORTING

Minimum Credits: 3
Maximum Credits: 3
This course will stress in-depth-interpretive reporting in specialized areas such as science, business, and politics.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0550 or 0610

ENGWRT 1770 - STUDIO IN AUDIO FICTION

Minimum Credits: 3
Maximum Credits: 3
Audio fiction has undergone a kind of renaissance, reimagining the possibilities and forms of classic radio drama for contemporary podcast audiences. In this advanced production course, we will take up this growing genre as a platform for experimentation. Drawing inspiration from focused listening assignments and from creative exchange with your peers you will work in a collaborative studio setting to produce an original, sound-rich work of audio fiction, aiming to come away with a polished, broadcast-worthy story by the end of the semester. This is a workshop-intensive course. You will be asked to provide detailed feedback on your peers, work and to offer up your own work-in-progress for critique at regular intervals, using this feedback to inform your story's development at every stage. Class discussions and activities include techniques for story structure, character development, dialogue, and directing, as well as hands-on instruction in mixing and sound design. This course assumes prior

experience in narrative audio production and/or a self-directed approach to the technical elements of audio recording and editing. Your active contributions to the collaborative working environment of this class are key to its success.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0710 OR ENGWRT 1132 or FILMST 1132 ; AND ENGWRT 1490 OR BY PERMISSION OF INSTRUCTOR

ENGWRT 1780 - STUDIO IN AUDIO DOCUMENTARY

Minimum Credits: 3
Maximum Credits: 3
In this advanced production course, we will explore the craft of audio documentary in a hands-on studio setting. Over the course of the semester, you will dedicate yourself to producing a single sound-rich work of audio documentary, which you will pitch, research, record, script, edit, and revise, aiming to come away with a polished, broadcast-worthy story by the end of the term. This is workshop-intensive course. You will provide detailed feedback on your peers, work and to offer up your own work-in-progress for critique at regular intervals, using this feedback to inform your story's development at every stage. Class discussions include strategies for generating and pitching stories, planning and conducting interviews, scripting and structuring tape, and working with music and field recordings. While our primary texts will be your own stories, we will also engage with a variety of forms of audio documentary through focused listening assignments, which will serve as models and inspiration for your work. This course assumes prior experience in narrative audio production and a self-directed approach to the technical elements of audio recording and editing.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0710 OR ENGWRT 1350 AND ENGWRT 1490 OR BY PERMISSION OF INSTRUCTOR

ENGWRT 1900 - INTERNSHIP: WRITING

Minimum Credits: 3
Maximum Credits: 3
This course offers students an opportunity to work as interns for local media, including newspapers, magazines and television stations. The internships are complemented by close supervision and seminars dealing with some of the ethical, legal, and practical issues facing the working professional.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

ENGWRT 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
This option permits students to design their own course with the approval of a department faculty member. Students must submit a proposal to the faculty member. Note: the proposed study must not duplicate the content of regularly offered courses.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ENGWRT 1904 - UTA IN WRITING

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

Environmental Studies

ENVSTD 1310 - HIMALAYAN GEOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
The Himalayan region is characterized by a tremendous range of social and cultural diversity that corresponds to climatic, ecological and

geographical variation, as well as local and regional geopolitical factors. Historical change from the emergence of early forms of social complexity centered on chiefs and their forts ' from which the regional designation of 'Garhwali' takes its name ' through the development of kingdoms and larger polities shows the intimate link between geography, environment and socio-political transformation. Similarly, local language patterns, regional religious practices, musical styles, mythology, food culture, sartorial fashion, architectural design, agricultural and transportation technologies and engineering and trade networks have all been shaped by the structure of Muntain barriers, bounded valley communities and bracketed lines of communication that follow river systems. Whereas the political economy of the Himalayas has been structured around agricultural production, and the development of elaborate field terrace systems, there have also been subsidiary economies centered on trans-Himalayan trade and pilgrimage as well as pastoral nomadism and transhumance. Since the colonial period, the Himalayas have increasingly become a place for rest, relaxation, tourism and adventure, and this ' along with further political transformations since Indian independence `has led to the rapid development of urban areas. This course will provide a survey of Himalayan history, society and culture with a focus on the relationship among nature, the environment and geography.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENVSTD 1311 - HIMALAYAN BIODIVERSITY

Minimum Credits: 3
Maximum Credits: 3
Ranging in altitude from several hundred meters above sea level to over seven thousand, from subtropical forests to high altitude meadows and deserts, and from areas with little or no rainfall to regions that are among the wettest in the world, the Himalayas define a geographical region of enormous geological variation and biodiversity. The goal of this course is to gain an understanding of this diversity, with a focus on ecology. More specifically we will examine ecology and ecosystems in terms of biosemiotics ' how and why organisms within an ecological niche communicate with one another, and how these patterns and structures of communication define different kinds of interdependence. Within the framework of standard classificatory schemes ' mammals, birds, reptiles, insects ' we will focus on particular species and specific niche systems for more detailed biosemiotic/behavioral analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ENVSTD 1350 - UNDERGRADUATE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This seminar brings together all undergraduate majors in anthropology for a seminar on the methods by which cultures around the world change over time. Defining such methods occupies much of any anthropologist's time, be he or she an ethnographer, archaeologist, physical anthropologist or linguist. The seminar therefore examines this central problem from many perspectives and affords the student ample opportunity for personal expression as well as rewarding discussion and research in a peer group environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Grad LG/SNC Basis

ENVSTD 1399 - HIMALAYAN POLITICAL ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
The Himalayan region is characterized by dramatic climatic and geological variation, a tremendous range of biodiversity and a complex ecology. Within the region there is also profound cultural variation. This course seeks to provide a critical perspective on the ecology and environment of the Himalayas by examining how different groups at the village, state, national and international level are implicated in the political ecology of the mountains. We will look at the way in which village farming communities use natural resources, what kind of pressure is put on resources as a result of development and population growth, how the mountain environment shapes the politics and resource distribution at the level of the state and, finally, how environmental and energy issues shape national policy and international relations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Film Studies

FILMST 0001 - FILMMAKING 1: FUNDAMENTALS

Minimum Credits: 3
Maximum Credits: 3

Filmmaking is a creative process that combines art, science, craft, and collaboration. This course is a hands-on introduction to the process, starting with the building blocks of motion pictures: light and cameras, composition, editing, and visual storytelling. You will complete two short videos over the course of the semester, shooting video with DSLR cameras and editing using Adobe Premiere Pro. In-class exercises will provide a deeper understanding of making moving images. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

FILMST 0120 - PHOTOGRAPHY 1

Minimum Credits: 3
Maximum Credits: 3
This course introduces you to the world of digital photography. During the semester, you will develop your unique photographic style through hands-on practice with camera controls, print quality, composition, and subject matter. You will explore different facets of what makes a quality photograph: exposure, quality of light, Photoshop, and digital printing. Lectures will examine the work of important contemporary and historical photographers. Grading is based on assignments, written exams and a final portfolio. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

FILMST 0121 - ANIMATION 1

Minimum Credits: 3
Maximum Credits: 3
This course in frame-by-frame motion picture production is designed for both beginners and seasoned animators. Over the course of the semester, you will be encouraged to experiment with a variety of media and techniques including digital 2D, hand-drawn 2D, clay, cutouts, puppets, time-lapse, and pixelation. Through lectures and demonstrations, you will explore storyboarding, animation history, character development, acting, and the principles of animation. While drawing is one approach to animation, drawing skills are not required to succeed. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0001
Course Attributes: Film Studies

FILMST 0221 - PHOTOGRAPHY 2

Minimum Credits: 3
Maximum Credits: 3
Expanding on the skills learned in Photography 1, this course will have you developing your photographic vision while honing your digital processing skills. Shooting assignments and lectures involve using Lightroom for image editing and adjustments, basic color management, monochrome, and color digital printing. You will also incorporate Photoshop, HDR, images for the web, contact sheets, and file archiving into your photographic workflow. Upon finishing the course, you will have a final project that is exhibition ready. Grading is based on class participation, written exams and assignments. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0120

FILMST 0225 - STUDIO LIGHTING

Minimum Credits: 3
Maximum Credits: 3
This is a production course in studio photography. The emphasis will be on lighting techniques. Assignments will include portraiture, tabletop set ups and synchronizing flash units with daylight. Considerable outside time is required to complete assignments. This course is taught at Pittsburgh Filmmakers' School of Filmmaking and Photography, located at 477 Melwood Avenue. All enrolled students will be responsible for paying a course fee for the use of Pittsburgh Filmmakers' facilities and equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: FILMST 0201
Course Attributes: Film Studies

FILMST 0250 - BUSINESS OF PHOTOGRAPHY AND MULTIMEDIA

Minimum Credits: 3
Maximum Credits: 3
In this class students learn the basics of professional practices as they relate to various photography markets including, Editorial, Advertising, Weddings, Portraits and Fine Art Photography. Students will learn to research and apply basic marketing principles so that they can successfully promote their work and skills as a professional photographer. Students will create business cards, letterhead and promotional pieces to use in the day-to-day dealings of their business. They will learn to sequence and format their portfolio (created in Advanced Photographic Production) for both print and online viewing. Other topics include branding, blogs, SEO - analytics, artist statements, and production proposals, copyright, licensing and professional business practices and etiquette.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FILMST 0400 - POST-PRODUCTION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students from film, video and photography to the desktop Macintosh computer-the preferred interface when dealing with graphics-related applications. Students will first become acquainted with and proficient in the mac operating system. The course will survey the most popular applications for manipulating photographic images, combining text with images, and doing simple video and audio editing on a mac. Students will integrate readings, lecture and in-class lab sessions to complete their own projects.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

FILMST 0410 - PHOTOGRAPHY 3

Minimum Credits: 3
Maximum Credits: 3
This course offers advanced Photoshop techniques. Learn to make complex selection and color correction, texture maps, advanced layering and masking principles. Learn to make custom color profiles along with essentials of digital color management. Emphasis is on the development and exploration of a personal vision and the creation of a digital portfolio.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG:College of General Studies
Course Attributes: Film Studies

FILMST 0430 - AUDIO PRODUCTION

Minimum Credits: 3
Maximum Credits: 3
This course explores sound as a fundamental element of human experience and media. Audio production - the recording and editing of sound - is the focus of the class, leading to the creation of an original sound file and podcast file as a final project. Emphasis is on creating a "soundscape": a rich, multi-layered production constructed from audio sources such as interviews, narration, ambience, live events, sound effects, and music. Class demonstrations cover how various microphones work and how to use them, as well as the physics, history, and theory of sound recording. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FILMST 0601 - FILMMAKING 2: SIGHT AND SOUND

Minimum Credits: 3
Maximum Credits: 3
In this hands-on course, you will continue to acquire the skills required to design, shoot and edit HD video. Demonstrations and in-class exercises introduce more professional camera operation, lighting, sound, special effects, and editing workflows. You will apply this new knowledge and

facility to several out-of-class assignments of increasing sophistication over the course of the semester. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0001 or ENGFLM 0590
Course Attributes: DSAS Creative Work General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req.

FILMST 0610 - DIGITAL EFFECTS 1

Minimum Credits: 3
Maximum Credits: 3
This course covers digital methods of combining video, photographs, graphics, text and other visual elements, and manipulation of those elements to tell a story. Course includes software such as Adobe After Effects, Adobe Photoshop and Illustrator. Topics include gaining an understanding of the structure of digital images, transparency and masking, Chroma keying, using layers and depth, key frame animation, image processing, effects and their use, formats, input and output of imagery and workflow methods.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: FILMST 0601
Course Attributes: Film Studies

FILMST 1001 - BROADCASTING

Minimum Credits: 3
Maximum Credits: 3
FILMST 1000 Broadcasting introduces students to television production through academic and hands-on experience, utilizing the University of Pittsburgh's new state-of-the-art television studios and equipment. In addition to students learning how to produce a live broadcast event for collegiate teams and a news broadcast, guest lecturers will talk about the industrial realities of the profession. Students will understand how to format and make a show rundown, apply graphics, utilize replay, work a television camera, comprehend audio application and mixing, produce and direct live events and news broadcast, as well as gain experience in front of the camera as news anchors, reporters and on-air talent for live events.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FILMST 1002 - BROADCASTING 2

Minimum Credits: 3
Maximum Credits: 3
The unique and dynamic Broadcasting 2 course will utilize every aspect of the state-of-the-art Pitt Studios, offering students a challenging and stimulating curriculum. Students will produce a Live Event Show Open (incorporating all pre-production elements), a Newscast, and a Podcast, incorporating video and animation marketing support. Students' projects will be crewed by classmates.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FMST 1885 or FILMST 1001

FILMST 1120 - DIRECTING ACTORS

Minimum Credits: 3
Maximum Credits: 3
This course explores the communication between directors and actors and how a director's vision translates into playable action on the screen. Class sessions will provide examples and practical experience in successful director/actor collaboration. Students will learn how to judge a good performance and will practice directing techniques that lead to better performances by actors. It is a laboratory class and students will direct each other. The format combines hands-on exercises, taping, screening and lecture. Grading is based on exercises, homework, taped scenes and participation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 1130
Course Attributes: Film Studies

FILMST 1130 - DIRECTING MOTION PICTURES

Minimum Credits: 3
Maximum Credits: 3
This course addresses some of the basic problems of designing and directing scenes for motion pictures. Some of the problems discussed are the relationship of film to reality, the meaning of cinematic techniques, continuity, shot selection, cut selection and visualization techniques. The format is a combination of lecture, screening and interactive group exercises. Extensive outside work is necessary. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0001 or ENGFLM 0590
Course Attributes: Film Studies

FILMST 1132 - ELEMENTS OF SCREENWRITING

Minimum Credits: 3
Maximum Credits: 3
This course will explore developing character-based stories in the screenplay form. Students will be exposed to a variety of readings, including original screenplays, related prose, and texts which reinforce basic tenets of good story telling. Students will write a completed 1st Act for a 3 to 5 part screenplay, building from idea to outline with particular attention to structure and character development.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

FILMST 1133 - INTERMEDIATE SCREENWRITING

Minimum Credits: 3
Maximum Credits: 3
This advanced course will help you develop your feature film idea into a full treatment. Weekly discussions and writing assignments focus on creating the plot, scene, sequences, setting, and subplots. By the end of the semester, you will have completed a scene-by-scene treatment of your original work. Considerable outside work is required. Grading is based on weekly assignments, the quality of the written treatment and class participation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0560 OR FMST 0700 OR ENGWRT 1132 OR FILMST 1132 OR FMST 1860 OR ENGFLM 1499 OR FMST 1194 OR ENGWRT 0520
Course Attributes: Film Studies

FILMST 1135 - WRITING THE ORIGINAL SERIES

Minimum Credits: 3
Maximum Credits: 3
Episodic stories can be traditional TV sitcoms or drama series, serialized narratives meant to be binged on streaming networks, independent web series, even stories told through a series of Snapchat stories. As different as they are structurally, they all have similar challenges - the writer must create a rich, interesting world and populate it with compelling characters in order to keep an audience watching from episode to episode. In this course students with basic screenwriting skills will apply those skills to the creation of an episodic series, from pitching the series through developing the story arc to writing the pilot episode.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 1132 or ENGWRT 0560

FILMST 1140 - ACTING FOR THE CAMERA

Minimum Credits: 3
Maximum Credits: 3
This course is designed for actors who would like to improve their craft by better understanding the differences between acting for the stage and acting for the camera. The course will describe and demonstrate the contrasts between stage and screen acting in specific shooting scripts and follow that with appropriate script study, character analysis and exercise in film acting techniques. Each class will include lecture, videotaped examples of

performances for analysis and critique and the practical experience of working in front of the camera.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG:College of General Studies
Course Attributes: Film Studies

FILMST 1145 - SOUND FOR MOTION PICTURES

Minimum Credits: 3
Maximum Credits: 3
This course will enable students to convert sound to a digital analog, recording, processing, storing and mixing sounds to varied effects in relation to visual media. Particular emphasis will be placed on the special requirements of sound for narrative film: intelligibility in voice reproduction, achieving and maintaining synchronism, and the relationship between voice, music, sound effects and story. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0500 or 0601
Course Attributes: Film Studies

FILMST 1157 - LIGHTING FOR MOTION PICTURES

Minimum Credits: 3
Maximum Credits: 3
This course allows students from both the film and video disciplines to expand their aesthetic boundaries by overcoming technical limitations. Students will learn theories of lighting to create a particular emotional, psychological, or physiological effect in the viewer, and will participate in lighting and shooting a variety of situations in class. Differences between lighting for film and video, light metering, and various lighting tools are among the topics covered. Contemporary film examples will be examined and discussed in class. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG:College of General Studies
Course Attributes: Film Studies

FILMST 1235 - EXPERIMENTAL CAMERA

Minimum Credits: 3
Maximum Credits: 3
This will be a workshop course dealing with a variety of techniques utilizing the camera as a tool for visual information outside of its normal use and function. The course will look at the history of cameras and the many image making devices that were invented to date.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG:College of General Studies
Course Attributes: Film Studies

FILMST 1580 - DIGITAL CINEMATOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
This course will cover advanced video technology and professional techniques of videography. Emphasis will be placed on high image quality and meeting broadcast specifications for video and audio. Professional-quality video cameras will be covered extensively. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0601
Course Attributes: Film Studies

FILMST 1600 - FILMMAKING 3: STORY TO SCREEN

Minimum Credits: 3
Maximum Credits: 3
Building on your experiences in Filmmaking 1 and 2, you will continue to develop your style as a filmmaker while creating more ambitious work and improving your technical skills. Demonstrations cover HD video cameras and lenses, advanced lighting and sound techniques, creating a pre-production binder, and advanced post-production workflows using Adobe Creative Cloud software. In addition to creating short projects in class, significant outside work is required, as you will take a short film from concept to a polished final version. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0601 or ENGFLM 1497 or SA 1380
Course Attributes: Film Studies

FILMST 1901 - INDEPENDENT STUDY

Minimum Credits: 3
Maximum Credits: 3
Under certain circumstances students may elect to study film production on an independent basis. Such independent study will be closely supervised by an instructor and will entail the writing of a contract prior to beginning the course. Independent study will involve a minimum of eight meetings (between student and teacher) per term. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies

FILMST 1921 - FILMMAKING 4: CAPSTONE

Minimum Credits: 3
Maximum Credits: 3
This is a capstone course in motion picture production. You should arrive with a script for a short film which you will work on throughout the semester. The film can be any genre, and should represent the culmination of your studies in filmmaking, meeting high standards of technical and aesthetic quality. Through script workshops, pre-production reviews, and critique of rough cuts, your instructor will mentor you through the filmmaking process. All enrolled students will be responsible for paying a course fee for the use of equipment.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 1130 and 1600 and (ENGWRT 0560 or FILMST 1132)
Course Attributes: Film Studies

Film and Media Studies

FMST 0100 - VISUAL LITERACY

Minimum Credits: 3
Maximum Credits: 3
Visual literacy is an emerging area of study which deals with the growing importance of visual culture in our contemporary world and how we interpret what is seen. This course will emphasize the process of critically viewing specific media artifacts and provide tools to students that will allow them to comprehend and evaluate information presented by a variety of forms of visual media, including television, video, film, photography, and the internet.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 0120 - INTRODUCTION TO FILM

Minimum Credits: 3
Maximum Credits: 3
This is an entry-level course on the visual arts that offers the student a broad introduction to the medium of film. As part of this overview, the class will consider such issues as: the process of contemporary film production and distribution; the nature of basic film forms; selected approaches to film criticism; comparisons between film and the other media. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies

FMST 0130 - INTRODUCTION TO VISUAL CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course develops skills to interpret visual culture in contemporary life. Using a wide variety of media, including film, television, advertisements, fashion magazines, museum exhibits, comic books, painting, graffiti, video games, the web, and photography, the course focuses on understanding how conceptions of visuality, gender, race, and politics shape definitions of high and low culture as well as questions of knowledge and being. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies

FMST 0150 - FILM ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the art of the cinema, and to the techniques for its formal analysis. It examines the nature of shot composition and visual framing, the use of color, the role of lighting as a pictorial element, the potentials of camera movement, the modes of editing and the nature of image/sound montage. It also introduces students to dominant cinema forms--narrative, experimental, documentary, etc. This is a Critical Studies course and is a required course for the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies

FMST 0170 - WORLD FILM HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course both introduces students to techniques of film analysis and acquaints them with major works and movements in international cinema. The course pays particular attention to the evolution of film narrative and visual style through landmarks in film development--European avant-garde films, British documentary, Italian neo-realism, etc. This is a Critical Studies course and is a required course for the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

FMST 0280 - HISTORY OF FRENCH CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the history of cinema in France from the beginnings of cinema to the present day. We will examine films from all periods and consider a diversity of forms and genres, including mainstream narrative films, art films, avant-garde experiments, blockbusters, and documentaries. No previous course experience with cinema is presumed as we will learn the basics of how to watch, discuss, and write about films and the film industry. The course will be taught in English; readings will be available in English; and all films with have English subtitles. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 0300 - ITALIAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
The course will present Italian movies from the forties to the present time. The films will provide us not only with the pleasure afforded by outstanding works of art but also with a means of assessing the central intellectual, historical, political, and economic phenomena that have shaped todays Italy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 0301 - HISTORY OF ITALIAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
Taught in English, this course will introduce students to the history of cinema in Italy from the era of silent films to the present day. We will analyze films from all periods and consider a diversity of forms and genres, including mainstream narrative films, art films, avant-garde experiments, and documentaries. In our century-long journey from the silent blockbuster movies of the 1910s to the Italian super-hero films of the 2010s, we will get to know world-class directors such as Federico Fellini and genre masters such as Dario Argento. We will see what Italian cinema has borrowed from other traditions, and what it has given in return. We will appreciate how Italian b-movies would not exist without American blockbusters, and how a director such as Quentin Tarantino would not exist without Italian b-movies. We will learn about Italy and about how much of its history and of its culture can be seen Ã¢ hidden or deliberately displayed Ã¢ through the frames of Italian films. No previous course experience with cinema is presumed, as we will learn the basics of how to watch, discuss, and write about films and the film industry. Readings will be available in English and all films will have English subtitles. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 0302 - ITALIAN AMERICA ON SCREEN

Minimum Credits: 3
Maximum Credits: 3
Italian America on Screen
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

FMST 0310 - CONTEMPORARY POLISH CINEMA:LITERATURE ON FILM

Minimum Credits: 3
Maximum Credits: 3
This course presents contemporary Polish cinema from 1945 to the present. Concepts will be studied in their historical, political, philosophical, and aesthetic perspective. The main trends (schools, movements) in Polish cinema, such as the so-called Polish school and the cinema of moral concern, and the works of most important modern polish filmmakers will be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 0320 - RUSSIAN FILM: EISENSTEIN AND COMPANY

Minimum Credits: 3
Maximum Credits: 3
The course presents the history of Russian and Soviet films, filmmaking, and the film industry from the coronation of Tsar Nicholas II to the death of Stalin.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, Film Studies, Writing Requirement Course

FMST 0321 - RUSSIAN FILM STALIN TO PUTIN

Minimum Credits: 3
Maximum Credits: 3
The course traces the history of Russo-Soviet cinema from the death of Stalin to the present. Particular attention is paid to the four major periods in Russo-Soviet history since the death of Stalin.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, Writing Intensive Course (WRIT)

FMST 0335 - SLOVAK, CZECH, AND CENTRAL EUROPEAN FILM

Minimum Credits: 3
Maximum Credits: 3
The course presents central European filmmaking in its cultural context, and central European (Czech, Slovak, Hungarian, etc.) Culture through film. The students learn to discuss them in their cultural context against the panorama of life in central Europe, as well as from the American perspective. The focus is both on film aesthetics, and on the social implications of the content of the films, which was considered crucial by central European directors, screenwriters, and audiences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

FMST 0430 - FILM THEORY

Minimum Credits: 3
Maximum Credits: 3
This course is designed as a survey of film theory as a historical practice. Film Theory gives students both a firm grasp on the major topics of film theory from its origins to new media, and an understanding of how those theories developed in relation to their historical contexts. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 0500 - INTRODUCTION TO FILM GENRES

Minimum Credits: 3
Maximum Credits: 3
This course surveys major film genres, which may include Westerns, musicals, horror, film noir, screwball comedy, etc. We will trace the history of film genres from the studio era to the present, including European transformations. The course seeks to relate film genres to the culture that created them. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Writing Intensive Course (WRIT)

FMST 0505 - INTRODUCTION TO NEW MEDIA

Minimum Credits: 3
Maximum Credits: 3
In this course we will look at how new media -- ranging from television, computers, digital image production, video games, to social media platforms and smart phones -- have begun to supplant the social and cultural prominence of film and other traditional media. We'll look at how these media work: at the history and theory of their development, at the changes they have brought about in a broader media culture, and at their social status and significance (e.g., The place they occupy in culture, the kinds of interactions they make possible). This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies

FMST 0700 - SCREENWRITING AND NARRATIVE

Minimum Credits: 3
Maximum Credits: 3
This course will explore developing character-based stories in the screenplay form. Students will be exposed to a variety of readings including original screenplays, related prose, and texts which reinforce basic tenets of good story telling. Students will write rigorously building from idea to outline with great attention to structure and character development. Students will develop writing abilities, critical facilities in approaching work, and an understanding of principles of storytelling common in narrative forms.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Writing Intensive Course (WRIT)

FMST 0710 - FILMMAKING: PRODUCTION AND CRITICISM

Minimum Credits: 3
Maximum Credits: 3
This course introduces filmmaking practices as related to cinematic expression, aesthetics, criticism, and ethics. Working in groups, students will produce short film projects. All aspects of production are viewed as a creative extension and continuation of the film writing, directing, and producing process. Through lectures and a range of readings, the class will explore craft, aesthetic, production and storytelling issues. This is an introductory Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS The Arts General Ed. Requirement, Film Studies

FMST 0760 - CRITICAL MAKING

Minimum Credits: 3
Maximum Credits: 3
The Maker movement is an emerging social and media form that is at once highly networked and post-digital. Making is situated at the intersection of social media, the online gift economy, and a participatory, interventionist engagement with one's physical environment. Drawing on open source ideals and innovation structures -the free sharing of code to enable collaborative development - making has become an attempt to democratize material culture through networked access to tools. MakerSpaces and MakerHubs have become critical nodes in efforts to materialize the virtual gift economy of the Internet. In this course we will engage the intellectual and practical roots of this new medial and social form and engage in our own critical making projects, utilizing scanning, modeling, and 3D printing technologies. We will begin by looking at the history and philosophy of open source software development, and then the political, social, cultural, and technological developments that have together given rise to critical maker culture. We will then learn some of the basic tools of scanning, modeling, and 3D printing. After initial modeling and printing assignments, students will form groups and develop collaborative final projects that involve materializing complex conceptual relationships from a topic of your choice and in a medium of your choice. The aim of this course is to "close the circuit" between creative conceptual production, social networking, and materialized object relationships. Critical making is about critically engaging and creatively remaking the world around us. By the end of the semester, you will become a critical maker! This is a Critical Studies course with Production elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

FMST 0762 - MEDIA/ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
From the late twentieth century to the present, ecology as a scientific discipline and set of cultural narratives has risen to the forefront of knowledge production as a way to study and understand complex biological systems, their environments, and their internal dynamics. During the same period, media systems have grown exponentially in complexity until they too have begun to exhibit some of the behaviors of ecological systems, including self-organization, feedback, evolution, and emergent properties. The term "media ecology" captures both this new, nonlinear systems approach to understanding media itself as well as the intersection between natural ecosystems and the technological assemblages with which they are intertwined. This course will explore both media that interface with natural ecosystems and works that engage contemporary media systems at different scales. The secret life of information, contagious media, and the post-natural ecologies of our present and future will challenge us to conceive of Media and Ecology as a single coupled system: the emblem of our contemporary environment. Students will have the option to produce collaborative media projects that explore the themes of the course. These can take the form of simulations, games, network graphing, film or video projects, local ecosystem analysis and/or visualization, or the mapping and analysis of a media ecosystem that interfaces with the environment. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 0790 - TECHNOLOGIES OF THE BODY

Minimum Credits: 3
Maximum Credits: 3
This course considers how we learn new technologies by looking at the treatment of the body in cinema and television, as well as animation, sports, gaming, and VR. In addition to analyzing media examples, students will experiment with low-tech and high-tech adaptations of optical toys and smart phone cinema to explore how movement and the body have been imagined in science and entertainment. This is a Critical Studies course with Production elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, Film Studies

FMST 0800 - FILMMAKING 1: FUNDAMENTALS

Minimum Credits: 3
Maximum Credits: 3
Filmmaking is a creative process that combines art, science, craft, and collaboration. This course is a hands-on introduction to the process, starting with the building blocks of motion pictures: light and cameras, composition, editing, and visual storytelling. You will complete two short videos over the course of the semester, shooting video with DSLR cameras and editing using Adobe Premiere Pro. In-class exercises will provide a deeper understanding of making moving images.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, Film Studies

FMST 0802 - PHOTOGRAPHY 1

Minimum Credits: 3
Maximum Credits: 3
This course introduces you to the world of digital photography. During the semester, you will develop your unique photographic style through hands-on practice with camera controls, print quality, composition, and subject matter. You will explore different facets of what makes a quality photograph: exposure, quality of light, Photoshop, and digital printing. Lectures will examine the work of important contemporary and historical photographers. Grading is based on assignments, written exams and a final portfolio.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 0805 - ANIMATION 1

Minimum Credits: 3
Maximum Credits: 3
This course in frame-by-frame motion picture production is designed for both beginners and seasoned animators. Over the course of the semester, you will be encouraged to experiment with a variety of media and techniques including digital 2D, hand-drawn 2D, clay, cutouts, puppets, time-lapse, and pixelation. Through lectures and demonstrations, you will explore storyboarding, animation history, character development, acting, and the principles of animation. While drawing is one approach to animation, drawing skills are not required to succeed.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 0816 - STUDIO LIGHTING

Minimum Credits: 3
Maximum Credits: 3
This is a production course in studio photography. The emphasis will be on lighting techniques. Assignments will include portraiture, tabletop set ups and synchronizing flash units with daylight. Considerable outside time is required to complete assignments.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 0826 - POST-PRODUCTION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students from film, video and photography to the desktop Macintosh computer-the preferred interface when dealing with graphics-related applications. Students will first become acquainted with and proficient in the mac operating system. The course will survey the most popular applications for manipulating photographic images, combining text with images, and doing simple video and audio editing on a mac. Students will integrate readings, lecture and in-class lab sessions to complete their own projects.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 0827 - ADVANCED EDITING

Minimum Credits: 3
Maximum Credits: 3
"Advanced Editing" offers students engaged in film and media production the unique opportunity to focus and expand their editing skills through the process of appropriating and repurposing pre-existing audiovisual materials. Students will work with materials from a range of sources, including popular Hollywood movies, digitally archived "orphan" films, television commercials, and propaganda films. The act of transforming already existing creative works into newly created short film projects will allow three key learning objectives to be met: (i) students will further hone their awareness of the ideological and formal functions of their source media as they decontextualize and recontextualize it for alternative purposes; (ii) students will develop a better awareness of their own critical and creative orientations as they are required to position their own projects in relation to others; (iii) students will develop their competence with multiple professional NLEs like Avid Media Composer, Adobe Premiere and DaVinci Resolve. By focusing on nonfiction and experimental editing practices, where the meaning and purpose of available footage is open for interpretation, students enrolled in the course will experience the transformative power of editing to shape and understand media.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

FMST 0830 - BUSINESS OF PHOTOGRAPHY AND MULTIMEDIA

Minimum Credits: 3
Maximum Credits: 3
In this class students learn the basics of professional practices as they relate to various photography markets including, Editorial, Advertising, Weddings, Portraits and Fine Art Photography. Students will learn to research and apply basic marketing principles so that they can successfully promote their work and skills as a professional photographer. Students will create business cards, letterhead and promotional pieces to use in the day-to-day dealings of their business. They will learn to sequence and format their portfolio (created in Advanced Photographic Production) for both print and online viewing. Other topics include branding, blogs, SEO - analytics, artist statements, and production proposals, copyright, licensing and professional business practices and etiquette.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 0835 - ELEMENTS OF AUDIO PRODUCTION

Minimum Credits: 3
Maximum Credits: 3
This course explores sound as a fundamental element of human experience and media. Audio production techniques are the primary focus of the class. Hands-on training prepares students to record broadcast-quality audio across a range of contexts¿including interviews, narration, field recordings, and live events¿and to edit and mix those recordings for various media using industry standard software. Class discussions cover how various microphones work and how to use them, as well as the physics, history, and theory of sound recording. This course welcomes students looking to deepen their understanding of audio production, as well curious beginners. This course fulfills a Technical Elective requirement in the Film and Media Studies Production Track.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 0845 - FILMMAKING 2: SIGHT AND SOUND

Minimum Credits: 3
Maximum Credits: 3
In this hands-on course, you will continue to acquire the skills required to design, shoot and edit HD video. Demonstrations and in-class exercises introduce more professional camera operation, lighting, sound, special effects, and editing workflows. You will apply this new knowledge and facility to several out-of-class assignments of increasing sophistication over the course of the semester.
Academic Career: Undergraduate

Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0001 or ENGFLM 0590 or FMST 0800 or FMST 0710
Course Attributes: DSAS Creative Work General Ed. Requirement, Film Studies

FMST 0850 - DIGITAL EFFECTS 1

Minimum Credits: 3
Maximum Credits: 3
This course covers digital methods of combining video, photographs, graphics, text and other visual elements, and manipulation of those elements to tell a story. Course includes software such as Adobe After Effects, Adobe Photoshop and Illustrator. Topics include gaining an understanding of the structure of digital images, transparency and masking, Chroma keying, using layers and depth, key frame animation, image processing, effects and their use, formats, input and output of imagery and workflow methods.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

FMST 0855 - TOPICS IN PRODUCTION

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. This course introduces students to production practices and techniques relevant to specific cinematic traditions or topics, such as horror film, comedy, science fiction, or other genres or type of media topics such as film movements or politics. Students will work individually and in groups on film and media projects. The course may be repeated for credit if topics vary. This is a Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

FMST 1190 - CITY SYMPHONY

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. The city has been an integral part of the filmmaker's vocabulary since cinema's genesis in the late nineteenth century. The urban environment and the craft of film grew up together in the twentieth century, seasoned by various convergences of technology, one notable one in the 1920s and another over the last fifteen years. This course bridges these two periods, drawing on history and theory to interrogate the form of the city symphony film essay, and develop an urban filmmaking practice that allows students to gather and formulate their own reflections on London. The course is made up of two strands, City Symphony and Urban Scavenger, taught by the same team in double sessions. Students will be strongly encouraged to bring ideas from one to the other, and to combine critical analysis with practical filmmaking. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1191 - CITY MADE STRANGE: LONDON ON SCREEN IN HORROR AND SCIENCE FICTION CINEMA

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This course aims to explore the deep funds of strangeness and otherness that permeate London's places and spaces, through examining films and television series that show the city as a brimming reservoir of past and future shocks. The course will examine science fiction, horror and noir/neo-gothic cinema and television from all eras, with a particular emphasis on works that take London itself as a major part of their story. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1192 - POLITICAL MEDIA: FILM AND POWER IN THE 20TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This class examines the way media has been constructed and used by elite institutions to advance broad and specific goals for the management of populations and the establishment of political and economic conditions beneficial to those institutions. It also looks at the use of media by progressive and radical groups to challenge those conditions and institutions, beginning in the early twentieth century and expanding in the era of digital media. It includes particular focus on cinema and imperialism, making use of the resources in London and online at the Colonial Film Project. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

FMST 1193 - URBAN SCAVENGING

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This course will give students a critical look at the writing, development, and production of film in the 21st century. Using case studies and examples from the masters of filmmaking in both the United States and the United Kingdom, students will gain in-sight into the nature of production, the economics of making a film, and the potential avenues through which film can be distributed to an audience. This is a Critical Studies course with Production elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1194 - INDUSTRY INSIDER: FROM SHOWRUNNER TO FINAL CUT

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at the Pittsburgh-London Film Program. This course will give students the opportunity to learn about screenwriting from a professional screenwriter and producer. The scope of the course will take students through the process of writing for screen based on the very simple stages of concept, story, outline, draft, and the revision and development process. Students will also learn about the pitch process and be given opportunities to practice the pitch based on their own individual stories. This is a Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1195 - DIVERSITY IN BRITISH CINEMA: RACE, GENDER AND CLASS

Minimum Credits: 3
Maximum Credits: 3
This course considers race, gender and class in close dialogue with the underlying cultural phenomena that shape the British cinematic landscape. The course is designed to introduce students to British cinema whilst engaging in theory, practice and analysis. It intertwines historical accounts with film screenings and lectures as well as discussions with filmmakers and curators. This is a Category I course in the FMST major and minor for the Pittsburgh London Film Program study abroad.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1196 - DIGITAL MEDIA PRACTICE

Minimum Credits: 3
Maximum Credits: 3
This intensive and comprehensive course will allow students to create their own portfolio, including a selection of digital media techniques used in a wide range of settings, from marketing videos to audio-visual essays. Quickly and efficiently students will learn how to produce videos for social media, conduct interviews and present themselves in front of the camera. The course will offer basic skills in digital photography, camerawork, editing and podcast production. Students will also be able to choose one of the four specialised areas which include VR production, social media advertising, audiovisual essay filmmaking and digital journalism. The content of the studentsâ portfolios will be produced as part of weekly assignments throughout the course, as students develop their skills, with a final project in their area of specialisation.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1197 - MOVING IMAGE EDITING

Minimum Credits: 3
Maximum Credits: 3
Moving image editing: theory and practice is based on an innovative approach to editing techniques that sees them in a close dialogue with the underlying cultural phenomena that shape the current media landscape. The course is designed to introduce students to the theory, practice and art of editing. It intertwines historical accounts of editing practice with media analysis and hands-on exercises. This is a Category III course in the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1199 - THE AUSTRALASIAN NIGHTMARE

Minimum Credits: 3
Maximum Credits: 3
This is a study abroad course taught at Pitt in Sydney. The classic American horror is derived from a gothic heritage, an inheritor of a European context and its tropes; the falling apart of civilization through wars, disease, economic collapse, and a deconstruction of society. The horror that the current, post 9/11 generation has produced is inherently different; it plays upon central themes that pull from an Australasian context, driven from the horror films of Australia, Japan, and Korea. These films have been made and distributed outside of an American context but then repackaged to the west in remakes and revisits that awaken an American audience to themes of horror that are decidedly non-European in identity. This course will examine these films, comparing and contrasting European and Australasian tropes for horror as well as their reflection and impact on society. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

FMST 1200 - INTRODUCTION TO EAST ASIAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course investigates the ways in which film addresses and treats the major socio-cultural issues in modern society through a critical study of the works of Chinese and Japanese master filmmakers. The course focuses on changes in marriage and family patterns, women's roles and the plight of youth.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1215 - ADAPTED FOR THE SCREEN: CHINESE LITERATURE AND FILM

Minimum Credits: 3
Maximum Credits: 3
Adapted for the Screen: Chinese Literature and Film
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1220 - NEW CHINESE CINEMA

Minimum Credits: 3
Maximum Credits: 3
Students will study Chinese films made by filmmakers of mainland China and Taiwan. They will learn about origins, development, themes, and styles with major directors and important films of new Chinese cinema being studied. Students will have an opportunity to understand contemporary Chinese culture and society.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1225 - TRANSNATIONAL EAST ASIAN CINEMAS

Minimum Credits: 3
Maximum Credits: 3
This survey course comparatively studies the forms and histories of East Asian cinemas in the context of transnationalism, post-colonialism, regionalism, and globalization. This course, therefore, will explore the transnational connections among different film cultures in China, Taiwan, Hong Kong, Japan, and South Korea. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement

FMST 1230 - GLOBAL ANIME

Minimum Credits: 3
Maximum Credits: 3
This course introduces the arts, history, and culture of Japanese animation (anime) in a global context. We will focus on analyzing the forms and idioms of anime in relation to changing technological conditions and the media environment. Students are expected to relate the aesthetic and cultural characteristics of anime with their own experience of digital technologies, and to expand their interest in anime to wider theoretical questions about techno-culture and new media. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1235 - JAPANESE CULTURE AND SOCIETY THROUGH CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course provides a critical study of selected international prize winning Japanese films and compares these films with Western films dealing with similar themes. The student learns to analyze and interpret films; becomes familiar with particular genres of Japanese films compared with Western; studies the history of Japanese cinema and its place in international cinematography and exposes the inter cultural benefits of judging the content of the films from oriental and Western aesthetic perspectives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

FMST 1236 - JAPANESE LITERATURE ON SCREEN

Minimum Credits: 3
Maximum Credits: 3
This course will investigate how literature and film treat some major ideological and socio-cultural issues in Japanese society. Readings of pre-modern tales, modern fiction and contemporary novels. Film adaptations will represent the best of Japan's postwar cinematic tradition. The course is designed for the student interested in Japanese society, culture and intellectual currents through film and literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1240 - INTRODUCTION TO KOREA THROUGH FILMS

Minimum Credits: 3
Maximum Credits: 3
Introduces Korean cinema to students in broader (and at times narrow) cultural, social, and aesthetic contexts to investigate transnational media production and circulation, globalization, consumer culture, commercialization, and construction of national, ethnic and gender identities. Through this course, students will learn more about specific issues pertaining to Korea and its people, as well as gain familiarity with some prominent film

directors of Korea's. They will develop a critical and historical consciousness of Korean visual culture, assessing the worth and content of the films.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

FMST 1250 - BOLLYWOOD AND INDIAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course will offer an overview of various Indian cinema traditions in their historical, aesthetic, and cultural contexts. Students will learn how to analyze Indian films from the 1920s to the present in terms of formal techniques, narrative conventions, and viewing contexts and also in terms of broader historical contexts such as colonialism and the independence movement. The history and formal conventions of Mainstream Bombay Cinema will be counterpointed with other kinds of Indian film. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

FMST 1260 - BRITISH FILM

Minimum Credits: 3
Maximum Credits: 3
This course explores the status of British film as a national cinema. It examines the forms and styles indigenous to British cinema; the relationship of British cinema to British social reality; the changes in film language, production and forms as they relate to the development of British cinema. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1261 - IRISH FILM

Minimum Credits: 3
Maximum Credits: 3
Irish Film will consider what it means to think about films in terms of being a national cinema or part of the transnational cinema during the global Hollywood era. We will also consider how the UK and USA imagine Ireland as well as what effect Irish cinema has had on other cinemas due to immigration and the increasing visibility of Irish directors, locations, and actors in the international industry. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor, and also counts for the Irish minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1270 - AMERICAN FILM 1

Minimum Credits: 3
Maximum Credits: 3
This course explores the development of American film from 1895 to 1939. Though the course will emphasize the evolution of American film style and genre, attention will also be paid to the history of the American film industry, and the relationship between Hollywood cinema and the broader cultural context of American society. The course will provide the student with the historical and aesthetic background with which to better appreciate the American cinema of today and yesterday. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1271 - AMERICAN FILM 2

Minimum Credits: 3
Maximum Credits: 3

This course explores the development of American film from 1940 to the present. The course examines the evolution of American film style and genre, the history of the American film industry, and the relationship between Hollywood cinema and the broader cultural context of American society. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1275 - CONTEMPORARY FILM

Minimum Credits: 3
Maximum Credits: 3
Surveys international film from 1970 to the present and the major film movements of the period. It also demonstrates the stylistic and cultural interrelationships between the international film schools. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, Writing Requirement Course

FMST 1292 - NAZI CULTURE

Minimum Credits: 3
Maximum Credits: 3
In an era of Alt-Right and growing neo-Nazi movements, this course takes us to the past to understand our present. We will rely on the films and other primary sources of the Third Reich to understand the conditions in Germany and what motivated the Germans to make the choices they did. We will examine anti-Semitism, racism, gender and sexuality, mass culture, the cult of the leader, propaganda, and more.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

FMST 1293 - NEW GERMAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
Devastated after World War II, starting in the 1960s a number of German directors like Herzog, Fassbinder, Wenders, Kluge, Annders-Abrahms managed to bring international attention back to German cinema. They competed against the film industry of Hollywood under difficult conditions of production, and in many instances made the difficult transition out of the art house and into the mainstream movie theater. Yet these names only represent a small portion of those directors active in the new German cinema. This class will examine the aesthetic and technical contributions of new German cinema as well as the historical and social context of its production. The technological, financial, and intellectual destruction caused by the experience of national socialism and World War II required creative responses that have led to a solid and symbolically rich body of work. In examining the themes and experimental forms of various filmmakers, students will gain insight into the issues that occupied the German public sphere from the 1960s onward.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

FMST 1321 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES

Minimum Credits: 3
Maximum Credits: 3
After the 1917 revolution in Russia, Lenin famously said: "to us film is the most important of all the arts." Communists were to use cinema for propaganda purposes, in order to carry out massive state-wide campaigns aiming to bring radical social change. However, Soviet avant-garde filmmakers were also concerned with revolutionizing filmmaking itself. Some three decades after Lenin's remarks, the leaders of the countries of Eastern Europe which had become "Soviet satellites" after World War II, attempted to use censorship and control over the arts and cinema to produce effective propaganda for their own political campaigns. Writers, artists, and filmmakers were coveted allies of these new communist regimes that came to power in the 1940s. Again, however, filmmakers and actors did not always toe the Party line. Some were able to use film to craft complex works with subtle messages portraying aspects of daily life as it was experienced by ordinary people under the new regimes. Films that we will watch and analyze, released in Hungary, Romania, Yugoslavia, Poland, and Czechoslovakia in the decades before the fall of communism in 1989 managed to depict, evoke, and criticize "really existing communism." This course will trace the history of East European communism and of East European film-making from 1944 to 1990, acquainting students with examples from an exceptional body of cinematographic work together with the broad outlines of East European history. Students will learn to "read" films from 20th century Eastern Europe in their cultural, political, and historical

context. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

FMST 1331 - JEWS AND THE AMERICAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to: the prominent roles 0f Jews in the American cinema (as producers, directors and performers); the manner in which issues of Jewish identity (including the negative aspect of ethnic stereotypes) and topics such as anti-Semitism and the holocaust have been treated in the American cinema; and the way in which film genre intersects with issues of Jews in American film (e.g. Comedy and so-called "Jewish humor", the appeal to Melo drama in the social problem film, etc.).
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1340 - U.S. LATINO FILM

Minimum Credits: 3
Maximum Credits: 3
The major purpose of the course consists of illustrating and analyzing the role of the audiovisual media film (fiction and documentary) and video (and television, to a certain degree) for an understanding of the socio-cultural and conceptual status that Latina/o identities have acquired in today's society. Thematically, the course will focus on themes of modernity vs. tradition in U.S. Latino culture. The course uses a selection of audiovisual materials which is fairly innovative in its variety. Chicano films and videos will constitute the major part of the material.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1341 - LATIN AMERICAN FILM & MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the study of Latin American film and media by both engaging in critical viewing/reading of Latin American film and media production, as well as an exploration of relevant topics and theoretical frameworks. We will engage with questions of film and representation, art and politics, and culture and economy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1346 - DRUGS, MONEY AND VIOLENCE: NARCO-CULTURE IN LATIN AMERICAN FILM

Minimum Credits: 3
Maximum Credits: 3
This course explores the complex, multi-layered, and often contradictory world of transnational narcotics traffic particularly as it is configured in and through contemporary Latin American cinema. Departing from the contention that the relations between drug trafficking networks, governmental responses to the drug trade, drug production and consumption, are not clear and transparent as depicted in dominant discourses exemplified by the narrative of the War on Drugs, this course analyzes narco-culture not as a simplistic response centered merely on the idolization of drug lords or drug culture, but as a dynamic creative current that tries to make sense of the complexity and violence of the world of drugs. Why do official narratives of capitalist enterprise disavow the capitalist foundation of the drug trade? How are discourses of security and protection ironically embodied in violent militarized actions and neo-imperial ventures? How does the criminalization of certain cultural practices and symbols - particular languages, dress codes, music - relate to the racialization and sexualization of certain peoples and bodies? Moreover, how can we understand the (global) commercial success of narco-culture as exemplified by recent mainstream media and popular culture? In this course, we will address these questions by engaging in close reading/viewing of contemporary Latin American films that center on representations and (re)productions of narco-culture. These primary works will be examined in conjunction with secondary readings that discuss topics relevant to our analysis of narco-culture, such as globalization, neoliberal capitalism, immigration, femicides, cultural appropriation, and racial and gender construction.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1350 - FILM DIRECTORS

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific director. This course looks at the mode of production of films and works to understand the interweaving contributions of directors, producers and screenwriters. It will also consider less personal forces--social climate, studio style, genre and audience taste. It examines the films of particular directors for signs of personal style, theme, or personal preoccupation. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1352 - ORSON WELLES

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the screen career of Orson Welles. In considering his films, the course explores the evolution of Welles' cinematic style; the thematic concerns of his work; the ideological implications of his fictional universe; and his contribution to the development of American narrative cinema. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1355 - HITCHCOCK'S FILMS

Minimum Credits: 3
Maximum Credits: 3
This course will look at the development of Hitchcock's cinema as a way of touching upon issues central to the study of film as a cultural force; the relationship between art and entertainment; the social origins of suspense and fear; the role of the director in creating a film's meaning; the role and function of genre and cross-generic influence. We will closely look at films from all phases of Hitchcock's career and examine what their style, tone, and subject matter reveal about the powers of cinema and Hitchcock's influence on a new generation of directors. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Writing Intensive Course (WRIT)

FMST 1357 - THE FILMS OF STANLEY KUBRICK

Minimum Credits: 3
Maximum Credits: 3
This course aims to discover the extent to which Kubrick's films are unified in style and theme. We will explore their sources in other films, reputed novels and short stories. Special attention will be paid to themes commonly found in Kubrick; a satirical view of society, the links between violence and sexuality, etc. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1360 - SPIKE LEE

Minimum Credits: 3
Maximum Credits: 3
Spike Lee's films, videos, and TV work have been both provocative and groundbreaking, challenging the structures of American filmmaking at the level of production, reception, and film style. Including feature films, documentaries, music videos, and mini-series, his work has a diversity that discourages the restrictive labels of African-American director or independent director. This course will cover most of this body of work in terms of Lee's cinematic style and cultural concerns, and also in terms of the cultural debates his work has triggered or participated in. By the very nature of

these films, a Spike Lee course has to engage with much more than directorial style and vision alone, and will thus also be an opportunity to consider various approaches to the study of film. This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1410 - FILM AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course examines film production, economics and forms of representation as reflections of political attitudes. We will study a variety of narrative and non-fiction films which reveal differing political points of view, ranging from those that legitimize the dominant culture to those which criticize, if not challenge, dominant attitudes. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, Writing Requirement Course

FMST 1411 - FILM AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will examine film's convergence with, and divergence from, the literary arts. From this discussion will emerge an understanding of film's debt to literary models, as well as its own unique and innovative contributions to narrative, poetic and essay form.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, Writing Requirement Course

FMST 1411 - FILM AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Cinema has enjoyed a close relationship with literature, borrowing from literary source texts and forms. Yet this relationship is not uncomplicated, nor is it unidirectional: the cinema offers new possibilities for novelistic source texts, poses interesting problems for literature's authors and readers alike and provokes a reconsideration of age-old debates of the divide between words and images. Thus this course examines film's convergence with, and divergence from, literary forms. Poised at the intersection of the study of film and the study of literature, it enables us to explore what is most unique -- and perhaps most interesting -- about each of the media as we consider their overlap. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

FMST 1412 - CINEMA AND VIDEO GAMES

Minimum Credits: 3
Maximum Credits: 3
This course introduces a comparative study of cinema and video games, exploring the historical, cultural, aesthetic, technological and industrial intersections between these two media forms. Combining film screenings with game plays, we will try to understand how cinema and video games inform, influence and converge with each other, as well as how the interrelations between these two media may have affected visual cultures at large. We will focus on race, gender, and ethical issues of visual representations in both cinema and video games, discussing the political questions of identity, power and representation in popular culture. The class also intends to provide students with analytical frameworks in film and media studies to guide their critical interpretations of the technology, history, and forms of video games. Through writings of game designers, film scholars and media theorists, we will consider the foundational role of the discipline of film studies in the formation of critical game studies. Students will be introduced to some key theoretical questions and concepts, such as realism, affect, hypertext, interactivity, post-humanism, media convergence and participatory culture, which are crucial for understanding the technological, cultural and social conditions of both cinema and video games in the digital age.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1412 - CINEMA AND VIDEO GAMES

Minimum Credits: 3
Maximum Credits: 3
This course introduces a comparative study of cinema and video games, exploring the historical, cultural, aesthetic, technological and industrial intersections between these two media forms. Combining film screenings with game plays, we will try to understand how cinema and video games inform, influence and converge with each other, as well as how the interrelations between these two media may have affected visual cultures at large. We will focus on race, gender, and ethical issues of visual representations in both cinema and video games, discussing the political questions of identity, power and representation in popular culture. The class also intends to provide students with analytical frameworks in film and media studies to guide their critical interpretations of the technology, history, and forms of video games. Through writings of game designers, film scholars and media theorists, we will consider the foundational role of the discipline of film studies in the formation of critical game studies. Students will be introduced to some key theoretical questions and concepts, such as realism, affect, hypertext, interactivity, post-humanism, media convergence and participatory culture, which are crucial for understanding the technological, cultural and social conditions of both cinema and video games in the digital age.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1415 - FILM CENSORSHIP AND AMERICAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course considers some of the most important censorship battles in American history. As the first mass medium to pose a serious threat to the cultural hegemony of the genteel middle class, the movies initiated both a debate about the place of media in our society and a series of struggles over the control of commercialized leisure. This course seeks a deeper appreciation of the complexities of contemporary media politics through an engagement with the history of motion picture regulation. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

FMST 1416 - GENDER AND FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines and questions aspects of gender and sexuality in international cinema. While the course considers the intersectional realities affecting masculinity and femininity on-screen, it will also consider who is behind the camera and ideas of "authentic" representation. Attention will also be paid to the social and historical context in which these films were made, in an attempt to understand the relationship between art and ideology. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, Writing Intensive Course (WRIT)

FMST 1420 - THE STAR SYSTEM AND THE MOVIES

Minimum Credits: 3
Maximum Credits: 3
This course will deal with all aspects of the phenomenon of stardom in film: the production of stars, film acting, and fandom. This is not a course on any particular star, but we will use case studies of individual stars for our weekly focus. We will draw on film examples from the old Hollywood studio system as well as from post-studio films and popular culture. A particular emphasis of the course will be gendered differences between star images. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Writing Intensive Course (WRIT)

FMST 1421 - GLOBAL STARDOM AND CELEBRITY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the analysis of the "star text" of individual stars/celebrities, which involves the interrelationship of screen-mediated roles, off-screen appearances and information, publicity material, and cultural context. Students will research a specific star/celebrity as a nexus of global circulation and fandom, while addressing some core methodological questions: what is the difference between star biography and star analysis? How do we read the "star/celebrity text" in different local contexts and ideas about the public and the private? How does stardom presume and shape norms of identity pertaining to gender, sexuality, social class, race/ethnicity, bodily norms, and other cultural values? This is a Critical Studies course and counts for Category I towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1440 - FILM SOUND

Minimum Credits: 3
Maximum Credits: 3
In this course, we will shift the way we think about films and learn to listen to films, using the language and tools of audio analysis to analyze the aural environment produced by films. Topics include the history of film sound, the relation of sound and image, aural and visual pleasures, sound and narrative meaning, soundscapes and theories of shock and modernity, the aesthetics of analog and digital sound in cinema, the 'realism' of recorded sound, film sound and space, sound in documentary cinema, and culturally specific theories of sound. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1450 - TOPICS IN FILM

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. Explores selected issues in the production, reception, themes, or theory of film. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 1508 - TELEVISION ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course studies television as a visual medium, an industry, and as a cultural force by examining the forms television programming takes and the way these structures influence viewer response. We will examine specific television genres from longstanding series types (sitcoms, cop shows, serials, etc.) to the gendered forms of "quality" television. This is a Critical Studies course with Production elements and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Writing Intensive Course (WRIT)

FMST 1510 - ANIMATION STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course surveys the history of animation, both American and international. Providing an understanding of animation's history, technologies, and stylistic possibilities across national and international boundaries, the course will consider early animators through to contemporary uses of digital technologies with their fully realized characters inhabiting three-dimensional space. It will also have a thematic organization, focusing at times on specific techniques (e.g., cel animation) and styles (e.g., abstract). This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

FMST 1520 - FILM COMEDY

Minimum Credits: 3
Maximum Credits: 3
This course surveys film comedy from the silent period through the contemporary moment. It focuses on major comic performers and directors as well as on comic forms, traditions and their relation to politics. In addition the course considers a number of comedy subgenres, such as slapstick, romantic comedy, gross-out comedy, and the buddy film. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1522 - FILM MUSICAL

Minimum Credits: 3
Maximum Credits: 3
This course studies the musical as an example of a popular art in the age of mass culture, looking at the aesthetics and history of this genre as it relates to the culture that produced it. We will be looking at musicals with the goal of analyzing and understanding our reactions, and those of the mass audience. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1523 - FILM WESTERN

Minimum Credits: 3
Maximum Credits: 3
This course examines the meaning of the Western to a mass audience. More specifically we will explore the genre's popularity, the way it represents the past, the concept of the mythic hero, changes in the genre from 1939 to 1981, and the contributions to the genre of specific directors. Every effort will be made to connect changes in the Western to new concepts of America.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1523 - FILM WESTERN

Minimum Credits: 3
Maximum Credits: 3
This course examines the meaning of the Western to a mass audience. More specifically we will explore the genre's popularity, the way it represents the past, the concept of the mythic hero, changes in the genre over time, and the contributions of specific directors. We will consider how the Western adapts to changing concepts of America. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1525 - HORROR FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the kinds of narratives produced, the ways producers and directors have developed the genre, and the ways horror film exploits social attitudes and values to generate audience involvement.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1525 - HORROR FILM

Minimum Credits: 3
Maximum Credits: 3
This course will investigate the key films and critical discussions surrounding the horror genre from its silent film beginnings to the present. We will

use horror as a lens to ask wide-ranging questions about spectatorship, theory, history, aesthetics, and politics that have shaped and continue to transform film and media studies. This course examines horror subgenres, the ways that producers and directors have developed the genre, and the ways horror film exploits social attitudes and values to generate audience involvement. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1526 - THE WAR FILM

Minimum Credits: 3
Maximum Credits: 3
This course will consider stable and changing elements of the war film genre, while remaining attentive to specific cultural moments, beginning with World War I. Although the main emphasis of the course will be on the war film as genre, part of the semester will be devoted to documentary and non-fiction approaches to war in cinema. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1527 - SCIENCE FICTION FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the development of science fiction as a cinematic form, its relationship to genres such as horror and melodrama, its structure, images and style. We attempt to trace linkages between the films and social, political, scientific and aesthetic attitudes within the culture.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1527 - SCIENCE FICTION FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the development of science fiction as a cinematic form, its relationship to genres such as horror and melodrama, its structure, images and style. We attempt to trace linkages between the films and social, political, scientific and aesthetic attitudes within the culture.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1530 - FILM NOIR

Minimum Credits: 3
Maximum Credits: 3
This course will explore the notion of 'film noir' in a trans-national and trans-medial context. We will examine the classic films noir of the period 1941-1958 (e.g. Double Indemnity, The Killers and The Naked City), the films considered to be 'neo-noir' since the 1970s (e.g. Taxi Driver, Blade Runner, Fight Club and Memento), and the international films described as 'global noir' from Japan, Hong Kong, Europe, and many other places throughout the world (e.g. Better Tomorrow, Branded to Kill, Sonatine, and Oldboy). We will also explore how the generic modes and conventions of film noir have been incorporated into other media such as comics, animations, and video games (e.g. Ghost in the Shell, Cowboy Bebop, LA Noir and Heavy Rain). We will look at these films and media objects from the perspective of film art and history, of their relationship to wider socio-cultural contexts, and of their exploration of gender and sexuality. The course will explore debates as to whether film noir is a style, a genre, an idea in criticism, or a marketing category. We will examine the roots of film noir in German expressionism and hard-boiled detective fiction. We will examine the work of significant directors of these films, in both Hollywood and beyond, including Billy Wilder, Robert Siodmak, Fritz Lang, Orson Welles, Nicholas Ray, Guy Ritchie, Takashi Beat, Seijun Suzuki, John Woo, Johnnie To, and Park Chang-wook.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1530 - FILM NOIR

Minimum Credits: 3
Maximum Credits: 3
This course will explore the notion of 'film noir' in a trans-national and trans-medial context. We will examine the classic films noir of the period 1941-1958 (e.g. Double Indemnity, The Killers and The Naked City), the films considered to be 'neo-noir' since the 1970s (e.g. Taxi Driver, Blade Runner, Fight Club and Memento), and the international films described as 'global noir' from Japan, Hong Kong, Europe, and many other places throughout the world (e.g. Better Tomorrow, Branded to Kill, Sonatine, and Oldboy). We will also explore how the generic modes and conventions of film noir have been incorporated into other media such as comics, animations, and video games (e.g. Ghost in the Shell, Cowboy Bebop, LA Noir and Heavy Rain). We will look at these films and media objects from the perspective of film art and history, of their relationship to wider socio-cultural contexts, and of their exploration of gender and sexuality. The course will explore debates as to whether film noir is a style, a genre, an idea in criticism, or a marketing category. We will examine the roots of film noir in German expressionism and hard-boiled detective fiction. We will examine the work of significant directors of these films, in both Hollywood and beyond, including Billy Wilder, Robert Siodmak, Fritz Lang, Orson Welles, Nicholas Ray, Guy Ritchie, Takashi Beat, Seijun Suzuki, John Woo, Johnnie To, and Park Chang-wook.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1531 - CULT FILM

Minimum Credits: 3
Maximum Credits: 3
This course will interrogate the criteria by which a film is identified as cult. A cult movie is not made; a film only becomes cult through the consumption patterns of an audience. This course explores how the nature of cult viewership shifted in response to technological innovation: at first VCRs, then DVDs, and now the internet. This course also looks to how cult has shifted now that unavailable films or banned films are increasingly accessible due to shifts in new media and the dominance of internet commerce (international shopping, eBay, bootlegs, downloads). This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1532 - SUPERHEROES ON FILM AND TELEVISION

Minimum Credits: 3
Maximum Credits: 3
This course explores a wide range of issues relevant to the superhero genre in popular media, including: the origins of the genre; various cultural critics' responses to it; the intersections between superhero narratives, audiences, and the cultural and historical contexts that produce them; and the ever-changing form and structure of the genre itself. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1535 - WESTERNS AND SAMURAI FILMS

Minimum Credits: 3
Maximum Credits: 3
A focus on the critical comparative study of two filmic genres--the samurai representing Japanese cinema and the Western representing American cinema. The course demonstrates the analytical processes of the film leading to its structural unity; shows the significance of both genres with respect to the history of Japanese, American and European cinema; compares approaches to films of different countries and provides the overall benefits of approaching films from an intercultural standpoint.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1540 - DOCUMENTARY FILM

Minimum Credits: 3
Maximum Credits: 3
This course explores the nature and impact of the non fiction film, its changing forms, strategies for movies, and claims to veracity and objectivity. It is concerned with identifying types of documentary, the "motives" of such films, their audience and the problems posed by "documenting reality." This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1546 - EXPERIMENTAL CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course examines the development of experimental cinema beginning in Europe in the 1920s with dada and surrealist films by Marcel Duchamp, Luis Bunuel and others, and continuing in the U.S. and elsewhere after World War II. The films, many of which are non-narrative and some of which are "abstract", will be examined for the ways in which cinema is used for the filmmakers' personal expression. Consideration will be given to the artistic and cultural contexts in which the films were made, and comparisons will be made with other media, especially painting and sculpture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1548 - AMERICAN INDEPENDENT FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the development in the U.S. Of independently produced film as an art form, and the filmmaker as an artist, from World War II to the present. Filmmakers to be considered include Maya Deren, Kenneth Anger, Stan Brakhage, Bruce Baillie, Hollis Frampton and others. An examination will be made of the relationships between the films studied and other forms of modern art, such as "abstract expressionism", "structuralism" and "postmodernism". This course does not include "independent" Hollywood and other commercial feature filmmaking.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1549 - INDUSTRIES AND FESTIVALS: FILM AND MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course explores how film industries have shaped contemporary production, exhibition, and distribution practices with focus on the role of film festivals in the film industry. We will examine festival history, theory, and methods to learn how festivals have impacted industry history and how festivals are produced and executed. This is a Critical Studies course and counts for Category II for the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1550 - TOPICS IN GENRE

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. This course considers genres that are not commonly offered. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1585 - CINEMA AND REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course investigates the relationship between Black power era, Black American cinema, and the third cinema movement, which are traditionally understood to be distinct movement/moments only loosely related through overlapping politics. In the course, our primary focus will be third world and Black American film making, and the postcolonial, pan-national and militant theoretical texts and movements that influenced the directors. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

FMST 1610 - TEEN FILM

Minimum Credits: 3
Maximum Credits: 3
This course will look at a type of film that has been prominent in Hollywood and international cinema since 1955: the youth film or teen film or teenpic. The teenpic has been variously defined as films targeted at a teenage market and as films about teenagers (and sometimes both). In considering the teenpic as a genre, we will attempt to break it down into subgenres such as the juvenile delinquent film, the teen musical, the teen horror film, nostalgic teen films, postmodern youth cult films, African American teen films, "girl" teenpics, and LGBTQIA+ teenpics. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1615 - CHILDREN AND MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course examines contemporary children's media from social, cultural, and historical perspectives, with a focus on media in the United States produced by and for children ages 0-13. Video games, the internet, and emerging digital and portable technologies for communicating and consuming media are often tailored specifically to children, who, as "digital natives," are increasingly early adopters of new technologies. This course asks how children's media fits into contemporary debates about children's role in families, schooling, and the public sphere. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

FMST 1630 - PHOTOGRAPHY AND ART

Minimum Credits: 3
Maximum Credits: 3
This introductory course is intended to provide a thorough familiarity with the history of photography from its development in the 19th century to the present day, and to link that history to major trends in the history of modern art, such as realism, impressionism, cubism, surrealism, abstract art, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

FMST 1650 - TOPICS IN FILM GENRE AND THEME

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. This course seeks to provide a forum for new issues that might arise in the area of film genre and/or the thematic of film representation. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1655 - TOPICS IN CONTEMPORARY CINEMA

Minimum Credits: 3
Maximum Credits: 3
This is a course that changes topics every term; please see the Topic title and/or Class Notes for the specific focus. This course deals with issues related to contemporary cinema. This is a Critical Studies course and counts for Category II towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1699 - ADVANCED SEMINAR IN FILM STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course is designed for Film and Media Studies majors and can be taken only when all other major requirements are satisfied. It will focus on issues of film history (either as an historical survey or through an examination of particular themes and/or problems that have arisen in the critical literature). The class will be organized as a seminar, and will involve considerable writing and/or class presentation on the part of students. This Category II course is a required capstone in the Critical Studies track of the Film and Media Studies major.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Film Studies, Writing Intensive Course (WRIT)

FMST 1715 - MOCKUMENTARY: PRODUCTION AND CRITICISM

Minimum Credits: 3
Maximum Credits: 3
The mockumentary - a fictional film made to "look like" a documentary - became popularized as a term to describe a distinct genre in coverage of Rob Reiner's 1984 film This is Spinal Tap. Since then, the genre has evolved to treat a variety of subjects through a range of styles - including straightforward hoaxes, social parodies, and sharp criticisms of nonfictional form. In addition to readings, lectures and discussions, students in this class will produce short mockumentary projects. Previous production experience is not required. This is a Production course with Critical Studies elements and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1720 - VISITING FILMMAKER: PRODUCTION AND CRITICISM

Minimum Credits: 3
Maximum Credits: 3
This course allows students to experience the full process of making a professional micro-budget feature, experimental, or documentary film. Students work on a visiting filmmaker's film from conception to final shooting, while learning about the different jobs/tasks/departments needed to realize a completed work. This is a Production course and counts for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

FMST 1750 - CREATIVE PRODUCTION WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
Creative Production Workshop is a projects-based course in which students will research, define, schedule, budget, and workshop their own independent projects. In a collaborative learning environment, students develop and produce original digital projects while conducting critical investigations into their role as participants in and products of digitally mediated culture. The primary goal of the course is to design and execute a self-directed, self-designed, 14-week creative project. This process can be broken down into a series of smaller goals: Students will gather and create materials for the preliminary (treatment) stage of a project; conduct creative research to develop a project design; define the goals of a project and the areas of study; identify and address technical/logistical issues of the project; organize project materials; schedule and plan use of time; create a written description of a project; and make an oral/visual presentation of their project at different stages of its development. The methods of instruction will include discussion of assigned readings, in- and out-of-class viewings of assigned films, production instruction in the film editing lab, and workshop-style peer review and feedback at all stages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

FMST 1750 - CREATIVE PRODUCTION WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
Creative Production Workshop is a projects-based course in which students will research, define, schedule, budget, and workshop their own independent projects. In a collaborative learning environment, students develop and produce original digital projects while conducting critical investigations into their role as participants in and products of digitally mediated culture. The primary goal of the course is to design and execute a self-directed, self-designed, 14-week creative project. This process can be broken down into a series of smaller goals: Students will gather and create materials for the preliminary (treatment) stage of a project; conduct creative research to develop a project design; define the goals of a project and the areas of study; identify and address technical/logistical issues of the project; organize project materials; schedule and plan use of time; create a written description of a project; and make an oral/visual presentation of their project at different stages of its development. The methods of

instruction will include discussion of assigned readings, in- and out-of-class viewings of assigned films, production instruction in the film editing lab, and workshop-style peer review and feedback at all stages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

FMST 1765 - VIRTUAL REALITY

Minimum Credits: 3
Maximum Credits: 3
Can there be more than one reality? Is there even one? What relationship do the senses and the mind bear to the physical environment? From the dawn of human society, no topic has been more fiercely debated than the nature of reality. In narrative, philosophy, and media, virtual reality has always been with us. This course dives deep into the rabbit hole of the real and the virtual, an adventure that includes philosophy, literature, film, and, of course, VR headsets aplenty! In addition to exploring the history of the real and the virtual, we will consider the relationship of virtual reality to the body, to space, to human gesture and communication, and to code. We will also explore the role of the imagination and creativity in the generation of new worlds. You will learn to think historically, theoretically, and critically about VR. You will have the option of either writing critical papers or creating your own virtual environment or game as your final project. This course assumes no prior experience with VR or coding, but those skills can optionally be put to use in final projects. Come prepared to question your reality!
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1770 - DIGITAL STUDIO: IMAGING

Minimum Credits: 3
Maximum Credits: 3
Digital Studio: Imaging is a studio designed to immerse students in the investigation of digital art practices. Emphasis will be on the history and aesthetics of art and digital technology, including screen-based imaging practices, creative coding, and digital fabrication. Throughout the course, you will acquire and enhance technical skills, but the emphasis will be on the use of the computer as an art-making tool for your creative expression. Thoughtfulness, experimentation and curiosity is encouraged.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

FMST 1775 - DIGITAL STUDIO: VIDEO

Minimum Credits: 3
Maximum Credits: 3
This is an advanced studio designed for students to intensely experiment and explore the moving digital image in an art context. Students will explore the concepts and skills involved in working with digital video, from pre to post-production. Each student will propose and undertake a final, self-designed project during the final four weeks of the term. Major effort, time, research, imagination, productivity, and involvement are expected throughout the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

FMST 1777 - DIGITAL STUDIO: ANIMATION

Minimum Credits: 3
Maximum Credits: 3
This is an advanced course designed for students to intensely experiment and explore the moving digital image in an art context. Students will explore the concepts and skills involved in working with digital animation - from pre to post-production. Each student will propose and undertake a final, self-designed project during the final four weeks of the term. Major effort, time, imagination, productivity, and involvement are expected throughout the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (SA 0110 and 0180) or ENGFLM 0590 or FILMST 0001 or FMST 0800

FMST 1817 - LIGHTING FOR MOTION PICTURES

Minimum Credits: 3
Maximum Credits: 3
This course allows students from both the film and video disciplines to expand their aesthetic boundaries by overcoming technical limitations. Students will learn theories of lighting to create a particular emotional, psychological, or physiological effect in the viewer, and will participate in lighting and shooting a variety of situations in class. Differences between lighting for film and video, light metering, and various lighting tools are among the topics covered. Contemporary film examples will be examined and discussed in class.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 1828 - PHOTOGRAPHY 3

Minimum Credits: 3
Maximum Credits: 3
This course offers advanced Photoshop techniques. Learn to make complex selection and color correction, texture maps, advanced layering and masking principles. Learn to make custom color profiles along with essentials of digital color management. Emphasis is on the development and exploration of a personal vision and the creation of a digital portfolio.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 1846 - FILMMAKING 3: STORY TO SCREEN

Minimum Credits: 3
Maximum Credits: 3
Building on your experiences in Filmmaking 1 and 2, you will continue to develop your style as a filmmaker while creating more ambitious work and improving your technical skills. Demonstrations cover HD video cameras and lenses, advanced lighting and sound techniques, creating a pre-production binder, and advanced post-production workflows using Adobe Creative Cloud software. In addition to creating short projects in class, significant outside work is required, as you will take a short film from concept to a polished final version.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0601 or ENGFLM 1497 or SA 1380 or FMST 0845 or FMST 1193 or FMST 1775

FMST 1852 - DIRECTING ACTORS

Minimum Credits: 3
Maximum Credits: 3
This course explores the communication between directors and actors and how a director's vision translates into playable action on the screen. Class sessions will provide examples and practical experience in successful director/actor collaboration. Students will learn how to judge a good performance and will practice directing techniques that lead to better performances by actors. It is a laboratory class and students will direct each other. The format combines hands-on exercises, taping, screening and lecture. Grading is based on exercises, homework, taped scenes and participation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1855 - DIRECTING MOTION PICTURES

Minimum Credits: 3
Maximum Credits: 3
This course addresses some of the basic problems of designing and directing scenes for motion pictures. Some of the problems discussed are the relationship of film to reality, the meaning of cinematic techniques, continuity, shot selection, cut selection and visualization techniques. The format is a combination of lecture, screening and interactive group exercises. Extensive outside work is necessary.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1860 - ELEMENTS OF SCREENWRITING

Minimum Credits: 3
Maximum Credits: 3

This course will explore developing character-based stories in the screenplay form. Students will be exposed to a variety of readings, including original screenplays, related prose, and texts which reinforce basic tenets of good story telling. Students will write a completed 1st Act for a 3 to 5 part screenplay, building from idea to outline with particular attention to structure and character development.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1862 - INTERMEDIATE SCREENWRITING

Minimum Credits: 3
Maximum Credits: 3
This advanced course will help you develop your feature film idea into a full treatment. Weekly discussions and writing assignments focus on creating the plot, scene, sequences, setting, and subplots. By the end of the semester, you will have completed a scene-by-scene treatment of your original work. Considerable outside work is required. Grading is based on weekly assignments, the quality of the written treatment and class participation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENGWRT 0560 OR FMST 0700 OR ENGWRT 1132 OR FILMST 1132 OR FMST 1860 OR ENGFLM 1499 OR FMST 1194 OR ENGWRT 0520

FMST 1865 - WRITING THE ORIGINAL SERIES

Minimum Credits: 3
Maximum Credits: 3
Episodic stories can be traditional TV sitcoms or drama series, serialized narratives meant to be binged on streaming networks, independent web series, even stories told through a series of Snapchat stories. As different as they are structurally, they all have similar challenges - the writer must create a rich, interesting world and populate it with compelling characters in order to keep an audience watching from episode to episode. In this course students with basic screenwriting skills will apply those skills to the creation of an episodic series, from pitching the series through developing the story arc to writing the pilot episode.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 1870 - ACTING FOR THE CAMERA

Minimum Credits: 3
Maximum Credits: 3
This course is designed for actors who would like to improve their craft by better understanding the differences between acting for the stage and acting for the camera. The course will describe and demonstrate the contrasts between stage and screen acting in specific shooting scripts and follow that with appropriate script study, character analysis and exercise in film acting techniques. Each class will include lecture, videotaped examples of performances for analysis and critique and the practical experience of working in front of the camera.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1875 - SOUND FOR MOTION PICTURES

Minimum Credits: 3
Maximum Credits: 3
This course will enable students to convert sound to a digital analog, recording, processing, storing and mixing sounds to varied effects in relation to visual media. Particular emphasis will be placed on the special requirements of sound for narrative film: intelligibility in voice reproduction, achieving and maintaining synchronism, and the relationship between voice, music, sound effects and story.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FILMST 0500 or 0601 or FMST 0845

FMST 1880 - DIGITAL CINEMATOGRAPHY

Minimum Credits: 3
Maximum Credits: 3

This course will cover advanced video technology and professional techniques of videography. Emphasis will be placed on high image quality and meeting broadcast specifications for video and audio. Professional-quality video cameras will be covered extensively.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

FMST 1883 - EXPERIMENTAL CAMERA

Minimum Credits: 3
Maximum Credits: 3
This will be a workshop course dealing with a variety of techniques utilizing the camera as a tool for visual information outside of its normal use and function. The course will look at the history of cameras and the many image making devices that were invented to date.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 1885 - BROADCASTING

Minimum Credits: 3
Maximum Credits: 3
Broadcasting introduces students to television production through academic and hands-on experience, utilizing the University of Pittsburgh's new state-of-the-art television studios and equipment. In addition to students learning how to produce a live broadcast event for collegiate teams and a news broadcast, guest lecturers will talk about the industrial realities of the profession. Students will understand how to format and make a show rundown, apply graphics, utilize replay, work a television camera, comprehend audio application and mixing, produce and direct live events and news broadcast, as well as gain experience in front of the camera as news anchors, reporters and on-air talent for live events.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

FMST 1886 - BROADCASTING 2

Minimum Credits: 3
Maximum Credits: 3
The unique and dynamic Broadcasting 2 course will utilize every aspect of the state-of-the-art Pitt Studios, offering students a challenging and stimulating curriculum. Students will produce a Live Event Show Open (incorporating all pre-production elements), a Newscast, and a Podcast, incorporating video and animation marketing support. Students' projects will be crewed by classmates.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FMST 1885 or FILMST 1001

FMST 1890 - THE BUSINESS OF BROADCASTING

Minimum Credits: 3
Maximum Credits: 3
The Business of Broadcasting teaches students how business is incorporated into every form of television broadcasts, including newscasts, documentaries, live event, magazine, interview, Network series, social media and streaming services, from ethics, copyright, "back of house" (payroll, crew call, work-flow) to social media. This is a Category III course that combines critical studies and production elements. It counts for the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FMST 1893 - HUMAN INTEREST STORIES FOR BROADCAST

Minimum Credits: 3
Maximum Credits: 3
Human Interest Stories for Broadcast will teach students how to present and tell a compelling story about a person, place, or thing in the confines of television broadcast, streaming, or social media platform. Writing techniques for television, research techniques, interview techniques, adding graphics, mixing sound and music, video, tracking and voice-over will be required for the feature packages ranging from :45 seconds in length to 3:00 minutes in length. This is a Category III class that combines critical and production elements. This course counts for the Film and Media Studies major and minor.

Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

FMST 1900 - INTERNSHIP IN FILM AND MEDIA STUDIES

Minimum Credits: 1
Maximum Credits: 3
Working in consultation with faculty, advanced students wishing to pursue careers in film and media have the opportunity to work with independent media artists or production companies. This course offering is designed to give students valuable experience in their chosen field of study outside the college and classroom environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis
Course Attributes: Undergraduate Internship

FMST 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Under certain circumstances students may elect to study film and media on an independent basis. Such independent study will be closely supervised by a faculty member and will entail the writing of a proposal prior to beginning the course.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

FMST 1904 - UTA IN FILM AND MEDIA STUDIES

Minimum Credits: 1
Maximum Credits: 3
Undergraduate Teaching Assistants are arranged with individual faculty members and require special permission. A range of credit hours and grading options are available.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

FMST 1921 - FILMMAKING 4: CAPSTONE

Minimum Credits: 3
Maximum Credits: 3
This is a capstone course in motion picture production. Each student will have the option to create an individual project of their choice, which can be any genre of narrative, documentary, or experimental. Students who choose to work on their own personal project should be prepared to pitch the project to the class and the instructor during the first class session. Through script workshops, preproduction reviews, and critique of rough cuts, the instructor will mentor you through the filmmaking process. Depending on class size, students may have the option to instead work together on a collaborative project, with different students filling the roles of producer, writer, director, and editor, and taking on multiple roles in the production crew. This course is a requirement for Film and Media Studies students taking the Production Track.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (FILMST 1600 or FMST 1846) and (ENGWRT 0560 or FMST 0700 or FILMST 1132 or FMST 1860)

FMST 1930 - INTERNSHIP IN FILM AND MEDIA

Minimum Credits: 1
Maximum Credits: 3
Internships can be taken for credit with special permission from the Internship Coordinator in Film and Media Studies. One internship can count for Category III towards the Film and Media Studies major and minor.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

Finance

BUSFIN 1030 - INTRODUCTION TO FINANCE

Minimum Credits: 3
Maximum Credits: 3
Provides a survey and analysis of the problems and tools of financial decision-making by individuals and firms. The firm's role in the market system and the nature of its objective with reference to the welfare of investors and society is also treated. An analysis of the implications of this role to decisions regarding choice among alternative investment projects and capital budgeting decisions as well as an introduction to the structure of capital asset prices and the implications for financial policies of firms and individuals are also included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (BUSACC 0030 or BUSERV 1920 or CDACCT 6030 or MGMT 0022 or BUS 0115 or ACCT 0201) and (STAT 1000 or 1100 or MGMT 0024 or STAT 1040 or ECON 0204 or STAT 1131); PROG: College of Business Admin; LVL: So, Jr or Sr

BUSFIN 1031 - INTRODUCTION TO FINANCE HONORS + 1

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted to College of Business Admin Students Only.

BUSFIN 1311 - CORPORATE FINANCE

Minimum Credits: 3
Maximum Credits: 3
Investigates the investment and financing decisions of firms from the perspective of the corporate manager. The pedagogical format combines conceptual and case analyses so as to provide both a theoretical and practical foundation. Specific topics to be considered include the following: capital budgeting, cost of capital determination, capital structure decisions and dividend policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRADE 'C'); PLAN: Accounting, FInance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1316 - ADVANCED CORPORATE FINANCE

Minimum Credits: 3
Maximum Credits: 3
Examines a variety of applied topics in corporate finance, including mergers and acquisitions, corporate restructuring, leasing, pensions, short term financial management, and the use of derivatives in corporate finance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1311; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1321 - INVESTMENT MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Emphasizes the development of tools required for investment decision-making. Reviews various financial instruments, examines their historical performance for evidence of risk return trade-off, presents basic portfolio theory and its implications for diversification, discusses the capital asset pricing model, and empirical estimation of beta riskiness. Other topics include mutual fund performance and the theory of efficient markets.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1326 - EFFICIENCY OF CAPITAL MARKETS

Minimum Credits: 3
Maximum Credits: 3
This course covers a central issue in finance: the Efficient Market Hypothesis (EMH). The EMH states that security prices reflect all relevant information and implies that investors cannot earn excess profits. Evidence in support of the EMH and contrary to it is studied. The implications of efficiency impact all financial managers and individuals in their financial decisions. Topics include: what actions can a financial manager take to maximize shareholder wealth, why do prices fluctuate, and technical versus fundamental analysis. The course focuses on valuation methods like DCF and CAPM.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1327 - RISK MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course examines financial risk management from the perspective of the corporate manager. The overarching goal is to learn about why and how managers can create value for shareholders by way of risk management. In doing so, we will explore different sources of financial risk faced by managers and how these risks can be measured, quantified, and managed. The first part of the class focuses on the basics of forwards and options. The second part focuses on applications, including Monte Carlo simulation techniques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1328 - CAPITAL MARKETS

Minimum Credits: 3
Maximum Credits: 3
This course provides an in-depth analysis of stock and bond valuation. The analysis of bonds covers bond pricing principals, the term structure of interest rates, and fixed income portfolio management. The analysis of stocks focuses on earnings and dividend-based valuation models, and a discussion of "value investing" and indexing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1329 - FIXED-INCOME SECURITIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1331 - FINANCIAL INSTITUTIONS AND MARKETS

Minimum Credits: 3
Maximum Credits: 3
Analysis of the behavior of financial intermediaries in the capital market. The performance of capital markets and examination of the role of regulations of financial markets, and the effects of decision-making by individuals and firms are covered. Sources of short-term and long-term financing will also be analyzed.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRADE 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1341 - INTERNATIONAL FINANCE

Minimum Credits: 3
Maximum Credits: 3
This course applies the principles of finance to international issues in financial management. It deals in topics such as the valuation of foreign subsidiaries, estimating the cost of capital of foreign investments, investing in foreign multinational firms, the correlation of returns across international security markets, hedging foreign exchange risk, and the use of foreign securities markets.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD 'C') and 1311 and 1321; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors
Course Attributes: Global Studies

BUSFIN 1345 - MARKETS AND TRADING

Minimum Credits: 3
Maximum Credits: 3
This course gives participants a broad understanding of the operations of various financial markets with special focus on liquidity, market structure and trading. The course concentrates on the ops of exchanges, trading systems and broker-dealer intermediaries. Students will be exposed to range of issues regarding the formulation of trading decisions and market structure design and regulation. Simulation software will be used to provide experience making tactical trading decisions in different market structure environments. Students will manage equity portfolios using OTIS.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRADE 'C') and 1311 and 1321; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1347 - MERGERS, ACQUISITIONS AND CORPORATE STRUCTURES

Minimum Credits: 3
Maximum Credits: 3
This course examines the major structural transactions that corporations experience from an internal perspective, based on sound financial analysis conducted with an understanding of corporate governance, firm strategy, law, accounting, and organizational behavior. Particular emphasis will be on mergers and acquisitions (M&A), and include topics in venture capital, initial public offerings, buyouts, divestitures, and bankruptcy. Readings, case study analysis, and active class discussion are emphasized. Teams of students will put the M&A process into practice by searching out and analyzing potential target firms for a major corporation and presenting their analyses and recommendations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1311 and 1321; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1351 - FINANCIAL MODELING

Minimum Credits: 3
Maximum Credits: 3
The course applies economic theories to solve various problems in financial management and investments. Using a hands-on approach in building financial spreadsheet models, the student will gain knowledge of numerical and graphical practices. These include but are not limited to asset return calculations, portfolio theory, index models, and the capital asset pricing model, option pricing models, bond pricing and investment performance analysis. MS excel is the primary tool to implement these financial models, however the course will also make use of statistics and probability.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1030 (MIN GRADE 'C') and 1311 and 1321; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1355 - VALUATION

Minimum Credits: 3
Maximum Credits: 3
This course examines the topic of value: what it is, how to measure it, and how to use it to guide managerial decisions. This is done by accomplishing three objectives: 1) provide students with a conceptual framework for thinking about value; 2) provide students with tools for estimating value and measuring value creation and destruction; and 3) teach students how to apply valuation models in different settings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSFIN 1311 and 1321; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSFIN 1360 - REAL ESTATE FINANCE

Minimum Credits: 1.5
Maximum Credits: 1.5
This course provides an introduction to real estate with a focus on the valuation and financing of real estate. The following topics are expected to be covered as the course focuses on income producing properties: economic theory of real estate, valuation technique (including pro-forma cash flow projections), financing strategies, risk analysis, taxation, and the securitization of real property interests. No prior knowledge of the industry is required, but students are expected to rapidly acquire a working knowledge of real estate terminology and real estate markets. Classes are conducted in a standards lecture format with discussion required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSFIN 1365 - VALUATION 2

Minimum Credits: 3
Maximum Credits: 3
This is a continuation of valuation 1.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSFIN 1380 - GLOBAL FINANCIAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course will examine the history and development of the global economy. It will examine the structure and principal operations of the global financial system. In doing so it will explore the impact of these operations in terms of trade, financial assets, capital movements and economic growth, putting into evidence the new global processes and its impact especially over the Brics and European markets.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSFIN 1390 - FINANCE INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The finance internship provides business credits for project assignments that augment a professional finance work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD 'C'); PLAN: Finance (BSB)

BUSFIN 1395 - FINANCE INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of finance issues or problems to which they have been

introduced in other finance courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: BUSFIN 1030 (MIN GRAD: 'C'); PLAN: Finance (BSB)

French

FR 0001 - ELEMENTARY FRENCH 1

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the student to the oral-aural and reading-writing skills in the language. From the outset, students learn to use the spoken language and begin to work on good pronunciation, while at the same time developing the listening comprehension, reading, and writing skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0002 - ELEMENTARY FRENCH 2

Minimum Credits: 3
Maximum Credits: 3
This course introduces the students to the oral-aural and reading-writing skills in the language. From the outset, students learn to use the spoken language and begin to work on good pronunciation, while at the same time developing the listening comprehension, reading, and writing skills. This course is a logical continuation of elementary French 0001.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0003 - INTERMEDIATE FRENCH 1

Minimum Credits: 3
Maximum Credits: 3
This course is a logical continuation of the first-year sequence. Emphasis continues to be placed on the oral aural skills, but the reading and writing skills become increasingly stressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0004 - INTERMEDIATE FRENCH 2

Minimum Credits: 3
Maximum Credits: 3
This course is a continuation of French 0003. Reading skill is emphasized even more than in FR 0003 but continues to be accompanied by oral-aural and written work.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0006 - SPECIAL TOPICS IN CONVERSATION AND CULTURE

Minimum Credits: 1
Maximum Credits: 6
Designed for students at the second-year level of proficiency (French 3 or French 4), this course will treat topics in French and/or francophone cultures, with a focus on oral communication.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

FR 0008 - INTENSIVE FRENCH FOR READING 2

Minimum Credits: 4
Maximum Credits: 4
This course consists of translation and discussion in English of a variety of non-literary readings. It is a logical continuation of French 0007.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0007 (MIN GRADE: 'C')
Course Attributes: DSAS Second Language General Ed. Requirement, West European Studies

FR 0012 - FRENCH KISS: LOVE, SEX, FRANCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Gender, Sexuality & Women's St, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

FR 0014 - INTRODUCTION TO FRENCH-SPEAKING CANADA

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to French-speaking Canada as a linguistic and cultural geopolitical entity. While principal focus will be on Quebec , we will also examine French-speaking areas contiguous with Quebec and various isolates and extensions of this sociocultural area. We will begin chronologically with a historical presentation of the province's history as part of various geopolitical entities, and then focus on more contemporary Quebec, the bid for independence and the quiet restlessness of a "distinct society" concerned with its survival
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0016 - HISTORY OF FRENCH CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the history of cinema in France from the beginnings of cinema to the present day. We will examine films from all periods and consider a diversity of forms and genres, including mainstream narrative films, art films, avant-garde experiments, blockbusters, and documentaries. No previous course experience with cinema is presumed as we will learn the basics of how to watch, discuss, and write about films and the film industry. The course will be taught in English; readings will be available in English; and all films with have English subtitles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

FR 0017 - PARIS: URBANISM PAST AND PRESENT

Minimum Credits: 3
Maximum Credits: 3
This course embarks on a study of Paris as an ever-evolving urban center in time and space. A two-pronged approach sees the City of Light as both a geopolitic entity with a history of great importance and an idea that has influenced politics, society and the arts all over the world. The syllabus features both the diachronic evolution of Paris from Gallo-Roman times to the present day as well as the synchronic weight of Paris as place and notion both in and out of France.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

FR 0031 - ELEMENTARY FRENCH 1 FOR MBAS

Minimum Credits: 1.5
Maximum Credits: 1.5

French 0031 is designed for business students who have no previous knowledge of French. It is an elementary language acquisition course and aims to teach students how to carry out basic functions likely to be necessary in dealing with others in the target language. The course aims to develop very basic abilities in all four language skills--speaking, listening, reading, and writing and deals with culture as an integral part of each skill.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0070 - KINGS & QUEENS: FROM VIKINGS TO THE GUILLOTINE

Minimum Credits: 3
Maximum Credits: 3
French Vikings. A wicked Italian queen. Art, sex, and politics. Guillotines. The history of the French monarchy has it all. Join us as we study the art, palaces, gender performances, laws, ideas and people who created¿and undid¿the French monarchy. Explore historical artifacts and art objects from medieval France to the French and Haitian Revolutions. And then put your historical and cultural skills to work in understanding why monarchy is having such a moment now¿in television series, music videos, art, pop culture and politics. Course taught in English. No prerequisites. Counts toward the French studies minor and as an English-language course substitute for 1000-level course in the French major and as a course in English for the French minor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0080 - MODERN FRENCH NOVEL

Minimum Credits: 3
Maximum Credits: 3
What makes a great read? Is it plot? Characters? Breaking literary conventions? Immersing yourself in different times and different voices? Playing with your emotions? This course explores some of the great reads of modern and contemporary French literature to find out what defines "the modern French novel." We will focus on developing your skills as discerning, attentive, feeling readers as we practice different ways to study¿and enjoy¿novels. This course is about you as a reader; it's also about you as a writer. As part of this W course, you will learn ways to troubleshoot common writing difficulties (finding a topic, formulating a thesis, revising). Together, we practice a process approach to writing that includes informal and formal writing, a variety of revision activities, and developing competence in critical writing functions and formats. Come for the great reads¿and stay to create great writing!
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*

FR 0090 - EURO CHIC: THE INVENTION OF FASHION

Minimum Credits: 3
Maximum Credits: 3
Since the Renaissance, Italy and France have occupied a fundamental role in the establishment and development of fashion as a creative and commercial enterprise deeply rooted in cultural mores. The course address the historical shifts in the cultural understanding of gender roles, class belonging, consumption habits and expectations, the international circulation of craftmanship and celebrities, and technological innovation. We will start addressing the anthropology of body ornamentation, gender markings and the difference between costume and fashion. Our historical point of departure is the grand arrival of Catherine De Medici from Florence to Paris in 1547, following her marriage to King Henry II of France. We then follow the progressive establishment of Paris as the capital of European (and eventually international) fashion, together with Italian cities like Florence, Venice and Milan. We also take a significant detour through London during the "dandy" era of the early 19th century and the "mod" and "punk" trends of the decades between 1960 and 1980. Punk leads us into a discussion of current international "anti-fashion" trends, such as the politics and economics of privilege, cheap labor and environmental concerns about "fast fashion." This course is taught in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

FR 0100 - FRENCH FOR THE PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
This course is designed for students interested in learning French for professional purposes. As an introductory course, students will learn the

language practices necessary to initiate, carry out, and conclude basic professional transactions in the geographic and virtual French-speaking worlds.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: (College of Business Admin) or (School of Nursing) or (Swanson School of Engineering)

FR 0101 - ELEMENTARY FRENCH 1

Minimum Credits: 3
Maximum Credits: 3
A study of the grammar and vocabulary of elementary spoken and written French. Stresses grammatical structure and its correct application.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: UPB Global General Ed. Requirement, UPB Language General Ed. Requirement

FR 0102 - ELEMENTARY FRENCH 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of elementary French 1. A study of the grammar and vocabulary of elementary spoken and written French. Stresses grammatical structure and its correct application.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, UPB Global General Ed. Requirement, UPB Language General Ed. Requirement

FR 0103 - INTERMEDIATE FRENCH 1

Minimum Credits: 3
Maximum Credits: 3
This course is a logical continuation of the first-year sequence. Emphasis continues to be placed on the oral aural skills, but the reading and writing skills become increasingly stressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: College in High School - UGRD - students only.
Course Attributes: DSAS Second Language General Ed. Requirement, DSAS Second Language General Ed. Requirement

FR 0104 - INTERMEDIATE FRENCH 2: FRENCH IN A GLOBAL CONTEXT

Minimum Credits: 3
Maximum Credits: 3
What does it mean to speak French in today's globalized world? Find out in French 0104! This second-year course in French language and Francophone cultures approaches French or rather "Frenches" as an umbrella term for the spoken and written conventions of multiple French-speaking spaces that go well beyond the borders of modern France. We explore the global use of the French language as a cognitive and communicative vehicle that spans six continents and is now official in 29 countries. Emphasis is on communicative, cultural and cognitive competencies in the various Frenches of the world. The course integrates the study of pronunciation, grammar, and vocabulary with the topics of the course. By the end of the semester, students will be able to identify the salient features of different Francophone accents (sounds, words, and structures), all while engaging in spontaneous conversation or written communication on familiar topics using dialect-appropriate vocabulary and grammar. Though class discussions and the study of primary visual, written and sung texts, we will consider questions such as: How precisely is French "global"? How is the French spoken in one part of the world different from that spoken in other parts of the world? How do different Frenches reflect different cultural values? How does migration function between Francophone cultures? Prerequisite: FR 0103, placement, or equivalent. Fulfills DSAS General Education Requirement in Global Issues. Language of instruction: French.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0106 - CONVERSATION HOUR

Minimum Credits: 1
Maximum Credits: 1
This course is a one-hour weekly conversation workshop taught at the level of French 0103/0104. It is open to all students who have taken French 0102 at Pitt or equivalent elsewhere or who have the same proficiency level as would be expected after completion of such courses. We will approach oral skills in a relaxed and low-stakes environment. Based on the interests of the class, we will engage in various types of "conversation," including, but not limited to, current events in various Francophone polities, cultural products, practices and perspectives as well as speaking practice through debate and role-play. This course is meant to provide an arena to practice French and extra practice for students in 3-credit French language courses (especially 0103 and 0104) desirous of increasing their accuracy and fluency in the spoken language. It also serves students who want to maintain their French skills in order to enroll in a French course in a future semester. Grades will be calculated based on attendance and active participation in class. This course does not satisfy the Dietrich School language requirement.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

FR 0200 - FRENCH FOR THE PROFESSIONS 2

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0100 (Min Grade 'C'); PROG: College of Business Admin or Swanson School of Engineering or School of Nursing

FR 0220 - FRANCE IN THE 21ST CENTURY

Minimum Credits: 3
Maximum Credits: 3
Who are the French today? What role have historical events played in defining the country and its people? What perceptions do the French have of themselves? How do geography, urbanism, and regionalism define the French? Are Parisians really snobs? What do the French have to say about current social and political movements and ideologies related to democracy, capitalism, socialism, globalization, post-colonialism, multiculturalism, far-right nationalism, racism, Islamophobia, feminism, and sexuality? This course investigates these questions and more, while delving into the habits and behaviors of the French in their daily lives. To this end, students will study recent articles, videos, and other media.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0004 or 0104 or 0021 or 0027 or 0055 or 0056 (MIN GRADE: 'C' for all listed Courses)
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

FR 0221 - READING FRENCH: LITERATURE, MEDIA, CULTURE

Minimum Credits: 3
Maximum Credits: 3
How do French-speakers today experience media such as video games, graphic novels, literature, film, YouTube, medieval manuscripts, pre-modern books, and others in the digital age? This course examines how stories get told in French across different kinds of mediaâ??in illuminated manuscripts and graphic novels, in novels and films, in video games and fan fiction. You'll encounter some of the "classics" of French literatureâ??and you'll explore how these classics have been rethought, remediated, and revitalized for new media and new audiences in exciting ways. This course practices a supportive, structured approach to language acquisition, with a focus on boosting and enhancing your reading skills in French. Taught entirely in French.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0004 or 0104 or 0020 or 0027 or 0055 or 0056 (MIN GRADE: 'C' for all listed Courses)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

FR 0227 - THE FRENCH ATLANTIC

Minimum Credits: 3
Maximum Credits: 3
This course is a study of the history of French colonization of the "New World" of the Americas from the sixteenth to mid-twentieth centuries, just after the second World War. By adopting an "Atlantic" approach, we will examine Europe, Africa and the Americas as interconnected regions. The course explores several themes: Voyages et Rencontres; les Français en Amérique du Nord; la Traite des Noirs; les Lumières et le Nouveau Monde;

et Révolution à Saint-Domingue. Although each theme treats a different region and highlights a different time period, our approach will allow us to follow the writings of explorers, philosophers, administrators, generals, merchants, and former slaves around the Atlantic, from the coasts of France and West Africa, to the eastern United States, and south to the Caribbean and South American mainland. The course will be conducted in French.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0004 or 0104 or 0020 or 0021 or 0055 or 0056 (MIN GRADE: 'C' for all listed Courses)
Course Attributes: African Studies, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

FR 0255 - SPEAKING FRENCH: ATELIER D'EXPRESSION ORALE

Minimum Credits: 3
Maximum Credits: 3
As an oral skills course, French 0255 approaches speaking French in real life contexts. Focus is on speech acts. Students will learn how to present, narrate, describe, and speak French in various registers (from very informal to very formal) and with tact. We will continue to work on vocabulary building and grammatical mastery so that students are able to use French as needed to carry out various daily, professional and personal functions. Some examples of the speech acts we will learn to execute include: how to present oneself and one's peers, how to describe in detail people, places and things, how to narrate in the present, past and future, how to express and support points of views. These various speech acts will serve a larger framework of real life scenarios students may encounter later on in their studies or careers, for example when interviewing for a job, when interviewing others for a job, when speaking in front of a group, when speaking with colleagues, when running a meeting, when providing consulting services. The study and practice of spoken French is thus concentrated on the social turn and use in context. This course is taught entirely in French.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0004 or 0104 or 0020 or 0021 or 0027 or 0056 (MIN GRADE: 'C' for all listed Courses)
Course Attributes: West European Studies

FR 0256 - WRITING FRENCH: ATELIER D'EXPRESSION ECRITE

Minimum Credits: 3
Maximum Credits: 3
Question: What do Samuel Becket, Edith Philips, and Oscar Wilde have in common? Answer: they are all exophonic writers, writers who wrote in languages that were not their native tongues. And they were all English-speakers who wrote some or most of the their work in French. You can too! What are the secrets to writing well in a language that is not your first? How can you leverage all you know about writing in your native language to improve your written expression in French? "Writing French: Atelier d'expression Ã©crite" will teach you how to cultivate exophonic writing skills through a writing-as-process approach that is keyed to the challenges of foreign language composition. Class work and written assignments will include writing effective professional and personal correspondence, composing a CV or job rÃ©sumÃ©, writing journal articles and critiques as well as creative pieces (such as fables, poems, or song lyrics for a Francophone audience). Through textual modeling, cooccurrence analysis (words that go "together"), and comparative vocabulary and grammar review, you will learn techniques needed to write in a variety of genres and to "sound French."
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0004 or 0104 or 0020 or 0021 or 0027 or 0055 (MIN GRADE: 'C' for all listed Courses)
Course Attributes: West European Studies

FR 0258 - ADVANCED FRENCH CONVERSATION

Minimum Credits: 1
Maximum Credits: 1
An advanced conversation course in French for majors and non-majors who wish to maintain or improve their command of the French language through a discussion of contemporary topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0055
Course Attributes: West European Studies

FR 0530 - FILM ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to major films and film movements from the origins of cinema in 1890s to the present. We will focus on the impact of technological and social changes on cinema, while placing such film-specific events as the invention of cinema, the coming of sound, or the use of color, in broader historical and cultural contexts. We will consider how major film movements have in turn influenced other national or international cinemas around the world, including mainstream Hollywood cinema.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 0540 - WORLD FILM HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to major films and film movements from the origins of cinema in 1890s to the present. We will focus on the impact of technological and social changes on cinema, while placing such film-specific events as the invention of cinema, the coming of sound, or the use of color, in broader historical and cultural contexts. We will consider how major film movements have in turn influenced other national or international cinemas around the world, including mainstream Hollywood cinema.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1001 - POETRY

Minimum Credits: 3
Maximum Credits: 3
The study of poetry cannot be divorced from the special requirements of versification, we shall begin by examining the general aspects of French prosody. Then, the regular work of the class will be devoted to the close reading of poems by a number of poets, including Ronsard, Victor Hugo, Baudelaire, Rimbaud, Mallarme, Veraline and Apollinaire.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

FR 1012 - 17TH CENTURY TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course will treat some aspect of the literature of the 17th century in France.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1016 - 19TH CENTURY TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course will treat some aspect of the literature of the 19th century in France.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1018 - 20TH CENTURY TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course will treat some aspect of the literature of the 20th century in France.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Global Studies, West European Studies

FR 1022 - CREATIVE WRITING WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
In this workshop, you will create your own texts in French. We will work on the prose poem, the short story, the fairy tale, and creative nonfiction, while exploring the boundaries between these different genres and the stakes of reading and creating literature in today's digital world. The workshop format includes presentation of your work and guided peer critique in a collaborative and supportive environment, as well as discussions of textual "intermediality" and of literary models as inspiration for your own work. This course will focus on guided production of written work in French and on the language choices that writers make within the conventions of certain literary genres. You will organize and host a "book club" in French on a recently published novel from the French-speaking world. A public reading of a selection of your work, followed by a Q&A session with the audience, will be organized at the end of the semester. No previous experience in creative writing is required or expected. Taught entirely in French. Prerequisite: at least one of the following: FR20, FR21, FR27, FR55, FR56, or permission of the instructor.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

FR 1023 - FRENCH THEATRICAL WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
In "French Theatre Workshop," the class behaves as a performing troupe, with every student being involved in every stage of a theatre production. Students refine their communication skills by memorizing lines, delivering them, and interacting in a foreign language. They craft characters with the goal of conveying their own reading of L'Ecole des femmes in an artistic performance. In the first sessions, students analyze a classical French play written by Moliare, familiarizing themselves with the history of theatre and the types of characters displayed in European traditions. In L'Ecole des femmes, the playwright makes fun of Arnolphe, an insecure old man so afraid of being cheated on by his wife that he prefers to educate a girl from the countryside and mold her through his principles in order to marry her. In their staging of the play, students transform the early modern text into contemporary French and make it resonate in our post #MeToo era, giving their own interpretation of what is considered "traditional,""modest," or "daring" today. To that end, students are introduced to different acting techniques, from repeating alexandrins, movement work with Commedia Dell'Arte masks, and improvising in French around situations depicted in the play. Later in the semester, students either work on their acting, or help design the set, build the props, arrange the costumes, produce the flyers, and contribute to the overall staging of the performance that will be open to the general public, including all French majors and minors. The class weaves acting and digital creation, as the performance will also include short videos projected on the set. All students are expected to reflect on their experience and experiments with French Theatre by writing in a logbook throughout the semester, to participate in a collective brainstorm on the class forum, and to design a moodboard on Tumblr.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: FR 0020, 0021, 0027, 0055 or 0056.
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

FR 1025 - THE IDEA OF FRANCE

Minimum Credits: 3
Maximum Credits: 3
In this course, students will examine the question of how France, the French nation, and Frenchness (francité) have been imagined. What is the "idea of France" throughout different historical periods? How do modern notions of what France is imagined to be relate to pre-modern notions? What have different time periods (such as the Middle Ages, the Renaissance, the Enlightenment, colonization) contributed to the concept of France? What role does language play in Frenchness? How do concepts of race, gender, and ethnicity factor in to all these questions? This course will investigate what France was/is thought to be, how it is constructed through words, images, and acts. To treat this topic, we will take an interdisciplinary cultural studies approach. This means we will examine many types of "texts"¿including literature, philosophy, manifestos, historical documents, film, video, music, webpages, architecture, newspaper and magazine articles, essays, works of art, maps, encyclopedias, and dictionaries. We will investigate the concept of "citizenship" in challenging texts and relate it to current events and the news. This course is also about you sharing your knowledge and passion for things French with the general public, through research in the French Nationality Room archives and the organization of an event during the Week of Francophonie. You will also write formally and informally in French in several genres (academic paper, op-ed piece, rationale, podcast script). This course will be taught in French.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1031 - FRENCH PHONETICS

Minimum Credits: 3
Maximum Credits: 3

A systematic study of the sounds and sound patterns of French in theory and in practice. Emphasis is placed on oral work designed to perfect the student's pronunciation of the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

FR 1032 - ADVANCED GRAMMAR AND STYLISTICS

Minimum Credits: 3
Maximum Credits: 3
This course focuses on reading and writing as complementary communicative acts. Students engage in practical and theoretical study of French grammar, the analysis and imitation of stylistic and grammatical features found in selected French prose texts, and comparative stylistic analysis of English and French. Writing assignments include original compositions in French and short translations from French to English and English to French. Conducted in French.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

FR 1033 - BUSINESS FRENCH: LE FRANCAIS DES AFFAIRES

Minimum Credits: 3
Maximum Credits: 3
This course is a course in French language and francophone culture with a focus on business. Students will continue to perfect their general language skills and cultivate those special skills necessary to carry out commercial activities in French-speaking places.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0004 or 0104 and (FR 0020 or 0021 or 0055 or 0056); PROG: School of Arts and Sciences (UA-S) or College of Business Admin (UCBA)

FR 1036 - GREEN FRANCE: SITUATED ECOLOGIES

Minimum Credits: 3
Maximum Credits: 3
The Paris Climate Agreement. Climate change's effect on French wine and cheese. Nuclear energy in France. French green political parties. "Agro-ecology." Environmental rights in French philosophy. French climate fiction. French culture has always been closely connected to environmentalism and sustainability and to questions around climate change. Taught in English for a broad audience, "Green France" allows students from a variety of fields to consider French and Postcolonial French ecological and environmental challenges. We will adopt an interdisciplinary perspective, from disciplines such as sociology, economics, political science, cultural studies, philosophy, film and media studies, and literary studies. Students will consider French philosophical approaches to these issues as well as land- and energy-related issues in geographical spaces situated in specific historical, political, geographical, and anthropological contexts (including the French Hexagon, the French Caribbean, and Algeria). Students will study and analyze cultural materials, bringing in their own disciplinary interests to formulate a final research project on a topic related to sustainability/environmentalism, and they will share their work with their peers and online.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1038 - STRUCTURE OF MODERN FRENCH

Minimum Credits: 3
Maximum Credits: 3
This course will offer a problem-solving approach to the syntax of modern French and will focus on rule discovery and methods of syntactic argumentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1040 - FRENCH LANGUAGE PAST AND PRESENT

Minimum Credits: 3
Maximum Credits: 3
This course is designed to show how the language, as we know it today, has emerged, after two thousand years of change and reconstruction, from the language once known as Latin in the area once known as Gaul.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1052 - SPECIAL TOPICS IN FRENCH CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
This course, offered infrequently, will treat some aspect of French civilization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

FR 1053 - GLOBAL FRENCH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Writing Intensive Course (WRIT)

FR 1059 - 20TH CENTURY FRENCH CIVILIZATION: SPECIAL TOPIC

Minimum Credits: 3
Maximum Credits: 3
This course will treat some aspect of 20th century French civilization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

FR 1065 - GENDER, SEXUALITY, AND FRENCH THOUGHT

Minimum Credits: 3
Maximum Credits: 3
This course is taught in English. Some of the most important thinkers about gender and sexuality are French. In this course, you will study French philosophical thought about both gender and sexuality. We will discuss and evaluate the theoretical claims made by key French thinkers, including ethical relations between men and women that they posit or critique. Questions of language, discourse, and representation are central to this tradition, and we will evaluate to what extent this focus affects (positively or negatively) gender and sexual politics. How can language be political? To what extent can it promote gender equality? Questions of gender essentialism and the "nature" of men and women will also be central to the course. Gender and sexuality will be taken in the broad sense, and we will consider thought on women, equality, and feminism as well as queerness, homosexuality, intersex, masculinity, trans*, and race/gender intersections. We will also consider the transatlantic reception of French thought in American gender theory. This interdisciplinary course is open to all students. As the French have been deeply influential in gender theory, this course will help students understand a key Western intellectual tradition. This course is taught in English, and all readings will be in English. No knowledge of French is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, European and Eurasian Studies, Gender, Sexuality & Women's St, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

FR 1070 - GENDER AND SEXUALITY IN 21ST CENTURY FRANCE

Minimum Credits: 3
Maximum Credits: 3
French culture has always had much to say about questions of gender and sexuality. In this course, we will consider key cultural products, perspectives, and practices around the concept of gender broadly conceived, including masculinity, feminism, hetero/homosexuality, transgenre, and others. Questions of nation, race, and ethnicity will factor into our discussions as well, and we will think often about the words or language that texts employ to talk about gender. We will also engage in cross-cultural comparison between France and our own cultural context(s) to give us comparative insight into the world we live in. We will treat questions such as: What is the current 'crisis' in French masculinity? What does it mean to be a man today in France? What is the current state of feminism in France, and how does it differ from previous incarnations? How does the discourse of homosexuality and queerness compare to the US context? What does transgenre signify? When and how did transgenre appear as a category in France? How are French constructs of gender inflected with Arab or North African identities? What other recurring forms of intersectionality are there? And how is all this represented in cultural texts? Our focus will be French culture since the turn of the century. Taking an interdisciplinary cultural studies approach, this is not a literature course per se (though we will read some literature). To aid us in our task, we will discuss and analyze a wide variety of recent texts in French from the 21st century: comic books (BD), films, documentaries, YouTube videos, music, webpages, journalistic prose, manifestos, political and government tracts, school textbooks, autofiction, novels, children's literature, pop psychology, etc. As the course is taught entirely in French and all written work is in French, you will increase your linguistic proficiency in reading, writing, speaking, and listening. You will also acquire the semantic tools you need to talk and write about gender and sexuality in French. Prerequisite: at least six credits above French 4, or permission of the instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, European and Eurasian Studies, Gender, Sexuality & Women's St, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

FR 1076 - FRENCH INTELLECTUALS

Minimum Credits: 3
Maximum Credits: 3
From environmental issues to gender politics, from the culture of capitalism to universal human rights, from media encroachment to esthetic values, French intellectuals had something to say about it all! In this class, we will discuss the tradition and the contemporary practice of public intervention on the part of writers, artists, sociologists and philosophers in modern France. The class starts with the contemporary figure of French economist Thomas Piketty, and then goes through a chronological review of the significance of enlightenment thinkers such as Voltaire and Rousseau, early critics of capitalist society such as the writers Balzac and Stendhal, Emile Zola's famous denunciation of anti-Semitism in the French military establishment at the turn of the 19th/20th century, 20th-century French existentialist Jean-Paul Sartre, feminist thinkers such as Simone de Beauvoir and Monique Wittig, environmental critics such as the un-growth advocate Serge Latouche and postmodern sociologist Jean Baudrillard.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

FR 1085 - WOMEN'S VOICES IN FRENCH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
We will read texts written by women authors in France from the middle ages to the 20th century. By following the evolution of the issues faced by women writers we will discover how a good number of the current claims were already clearly expressed several centuries ago. We will also be able to understand better what is specific to our period, and to reflect upon what it means today for a woman to inscribe her voice in a male dominated society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: FR 0021 (Min Grade 'C')
Course Attributes: Gender, Sexuality & Women's St

FR 1088 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Period and literary topics are determined by the instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, West European Studies

FR 1090 - INTRODUCTION TO TRANSLATION STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course serves as a foundation course for the professional translation certificate program, and for related fields. It deals with translation theory and the general problematics of the translation process, providing a theoretical framework for translation and systematically linking theory and practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

FR 1095 - FRENCH PROFESSIONAL TRANSLATION 1

Minimum Credits: 3
Maximum Credits: 3
Dans ce cours, nous nous concentrerons sur la structure du franÃ§ais en privilÃ©giant une approche descriptiviste (plutÃ´t que normalisatrice). Alors, nous analyserons la langue franÃ§aise en tant que systÃ¨me qui s'impose aux locuteurs dÃ©sireux de s'en servir. Outre les analyses traditionnelles (phonÃ©tiques, phonologiques, morphologiques, syntaxiques, etc.) nous Ã©tudierons Ã©galement la stylistique comparÃ©e. Car ce n'est qu'en maÃ®trisant les rÃ©alisations linguistiques des matrices sÃ©mantiques propres au franÃ§ais que nous Ã©viterons les erreurs pragmatiques et sociolinguistiques que font la plupart des apprenants anglophones.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

FR 1098 - FRENCH LANGUAGE RIDER

Minimum Credits: 1
Maximum Credits: 3
Designed to accompany a main course taught in English with an FR designation, this 1-3 credit rider course provides students the opportunity to engage with principal course material in French. Students will read and study authentic documents in the target language pertinent to the main course subject matter. They will also have the chance to practice spontaneous and planned production skills in spoken French. Students must be enrolled in the main course to be eligible for the rider.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

FR 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
This course enables the student who has completed, or nearly completed, the French major to do research under the direction of a faculty member, on a topics of mutual interest.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

FR 1903 - HONORS DIRECTED RESEARCH:FRENCH MAJORS

Minimum Credits: 1
Maximum Credits: 3
This course is offered to French majors who have high academic achievement, both in French and in general. These students are invited by the French faculty to engage in a research project under the direction of a faculty member with whom they have previously studied at the advanced undergraduate level.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: West European Studies

FR 1905 - INTERNSHIP IN FRENCH

Minimum Credits: 1
Maximum Credits: 6
The student will work in a job setting in which knowledge of French language and/or culture is useful.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis
Course Attributes: Undergraduate Internship, West European Studies

FR 1907 - FRENCH UNDERGRADUATE TEACHING ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 3
This applied course in pedagogy is designed to provide advanced French majors the opportunity to share their knowledge, experience and passion for the French language and French-speaking cultures with underclassmen and students newer to the major. In concert with the faculty member teaching the course for which the French major will be the UTA, a list of duties will be discussed, among which may include : facilitating discussion groups or other collective fora, organizing tutorials and holding consultatory office hours, assisting faculty member in lesson planning, material(s) development and maintaining course Canvas sites and/or online document repositories for the course. Per the guidelines set by the Dietrich School of Arts and Sciences, French UTAs may not substitute teach for the faculty member, nor grade papers, quizzes or exams, nor assign any midterm or final grades, nor perform any work for the faculty member unrelated to the course in question. Faculty members under whom a French Major UTA works will meet regularly with said UTA throughout the term and provide guidance and support while articulating expectations clearly to the UTA. Attribution of credits (1-3) should be commensurate with the work to be performed and should be communicated to the UTA before the start of the term. Further details of the guidelines can be found on the Dietrich School's site.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

FR 1909 - UNDERGRADUATE RESEARCH ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

Freshman Program

FP 0006 - FIRST-YEAR SEMINAR

Minimum Credits: 3
Maximum Credits: 3
First-year Seminar (FP 0006) is offered in the spring term. It fulfills the seminar in composition requirement in the School of Arts and Sciences. This course uses readings, writing assignments, and discussions to explore a focused topic and examine ways in which high school and college-level writing differ.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENGCMP 0002 or 0003 or 0005 or 0010 or 0150 or 0152 or ENG 0101; TEST SCORE: SAT Verbal 560 or Higher or ACT English 24 or Higher; and Enrollment will be blocked if currently enrolled in, or previously enrolled in FP 0003.

Gender, Sexuality, and Women's Studies

GSWS 0001 - GENDER AND LEADERSHIP

Minimum Credits: 1
Maximum Credits: 1
Students residing in the women lead LLC enroll in this course, which is a one-credit experiential course in the fall term. This seminar will expose students to information about women leaders and the challenges they experience during their ascension to, and acceptance of, various leadership positions. The course will include discussion, reflection, and attendance at speakers and events within the Pitt and Pittsburgh community.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: Satisfactory/No Credit
Course Attributes: Gender, Sexuality & Women's Studies

GSWS 0002 - LGBTQIA+ COMMUNITIES

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

GSWS 0100 - INTRODUCTION TO GENDER, SEXUALITY, AND WOMEN'S STUDIES

Minimum Credits: 3
Maximum Credits: 3
What is sex? What is gender? What is sexuality? How are these concepts related to culture? To nature? To help you answer these important questions, this course will introduce you to the exciting field of gender and sexuality studies. We will use a range of interdisciplinary concepts, tools, and methods to understand and analyze sex, gender, femininity, masculinity, and sexuality. Through readings, multimedia, and class discussion, we will study how gender and sexuality are socially and culturally constructed. In addition, we will consider how gender intersects with other identity categories such as race, class, ethnicity, nation, age, ability, and sexuality. Because we all have a gender and a sexuality, this course is crucial for any profession and for understanding the world around us. Taught in discussion-based sections, it is also a great opportunity for you to develop your written and oral skills. Also, you will learn to apply the critical vocabulary used in gender studies to other fields of study. The course is open to all students regardless of background and has no pre-requisite. As a prerequisite for more advanced courses in the GSWS program and as the intro course for current or future students in the GSWS major and minor, this course will prepare you for more advanced coursework. Check the individual section to determine whether the section is a 'W' section.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Diversity General Ed. Requirements, Writing Requirement Course

GSWS 0150 - GENDER IN THE PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
How are the goals and concerns of feminism relevant in a variety of workplaces? Why haven't women achieved equal pay for equal work, compared to men? What is unpaid labor, and why does it matter? Why should my organization create policies that support individuals regardless of gender identity, gender expression, and sexuality (and what do those terms mean, anyway?)? To help you answer these important questions, this course will take an introductory, intersectional approach to gender in the professions. We will use a range of interdisciplinary concepts, tools, and methods to understand and analyze sex, gender, and sexuality as they relate to the world of work. Through readings, multimedia activities, and class discussion, students will develop tools to critically analyze the ways in which social and cultural forces shape us as gendered individuals and influence our career aspirations, professional interactions, and service experiences. In addition, we will consider how gender and sexuality intersect with other identity categories such as race, class, ethnicity, nationality, age, and ability. Because we all have a gender and a sexuality, this course is crucial for any profession and for understanding the world around us.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

GSWS 0200 - SEX, RACE, AND POPULAR CULTURE

Minimum Credits: 3
Maximum Credits: 3
Popular culture is often defined as a collection of ideas, images, beliefs and practices that have become an essential component of peoples' daily lives. While popular culture is dismissed by some as merely a mass consumer culture, others acknowledge that contemporary popular cultural forms may, in keeping with a history of once contemporary popular art, culture, and literature (e.g. Dickens, Warhol, etc.) Come to be understood as essential, canonical and elite. Ultimately, these materials may be read as a texts that inform our understanding of culture and social life and prompt such questions as: how does popular culture (re)construct our sense of "ordinary" life as something extraordinary? Why are some cultural forms dismissed and others more readily accepted? What social processes bring cultural forms into the public domain? This course will examine popular culture in a variety of forms such as: music, art, television, collectibles, internet, and social media. Students will consider examples from Western, non-Western, and "global" culture, but will use sex and sexuality, gender, and ideas of race to understand the relationship between popular culture, material culture, representation, and consumerism, and power and resistance. It will also address these phenomenon over time. This course will make especially strong

use of contemporary and popular media such as video clips, internet media and images, and music.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Diversity General Ed. Requirements

GSWS 0210 - WIRED WOMEN

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

GSWS 0220 - CONTEMPORARY ISSUES AND ARGUMENTS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

GSWS 0230 - INTRODUCTION TO LGBTQ STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to Lesbian, Gay, Bisexual, Trans and Queer (LGBTQ) Studies. Course readings will explore LGBTQ Studies from an interdisciplinary and intersectional perspective with a focus on how sexual orientation and gender shape human experience and access to privilege. Our work will foster a critical understanding of a range of issues in LGBTQ Studies, including LGBTQ as it relates to questions of sexual diversity, the legal history of LGBTQ lives, LGBTQ social movement, LGBTQ health, LGBTQ literature/art, LGBTQ history, global approaches to LGBTQ Studies, and theories and methods in LGBTQ studies. Students will choose a research topic in LGBTQ Studies and will develop a final paper that explores this topic using key concepts, theories, and methods in LGBTQ Studies. Final papers will also reflect on LGBTQ contributions to our understanding of human variation and diversity.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements

GSWS 0300 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course will treat a specific topic in gender, sexuality, and/or women's studies.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Gender, Sexuality & Women's Studies

GSWS 0400 - GENDER AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the interaction of gender and sexuality with science, medicine, and technology. The goal of this course is to assist students in developing an understanding of the ways in which science has constructed our understanding of gender and sexuality since the nineteenth century, as well as the lived experiences of people within the scientific community who shape and navigate these concepts. To accomplish this goal, we will apply feminist theory, including feminist critiques of the history of medicine, psychology, and science, and gender theory, to an investigation of the evolution of scientific knowledge regarding gender and sexuality, as well as race, disability, and health. We will also explore the ways in which people, especially women, people of color, and transpeople have interacted with technology, shaped scientific discourse. In each course lecture and discussion, we will focus on a broad range of scientific fields, discourses, and narratives to construct a comprehensive understanding of the scientific knowledge and identity in the modern world. While the readings focus largely on American and Western examples and experiences, class discussions and presentations will expand the scope of this class considerably, allowing students to understand the global relationship of gender and science.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GSWS 0500 - INTRODUCTION TO FEMINIST THEORY

Minimum Credits: 3
Maximum Credits: 3
This course is an interdisciplinary introduction to the feminist ideas and debates concerning gender, women and men, and their political, social and economic positions over the last two hundred years. While we will focus on the United States, there will be some engagement with global feminist perspectives on gender, race, class, and sexuality. In keeping with the activist nature of feminist theory, this course will approach 'theory' as attempts to answer fundamental questions about the power relations that structure our everyday lives and consciousness. Theory in this sense is a tool for thinking systematically about how the world works, and for constructing arguments about how it should work. Consequently, we will pay particular attention to the (de)construction of power in both public and private relations as we critically analyze texts, discuss and present ideas in class, and complete written analyses. Students will have opportunities to apply feminist theories to their work in their home disciplines.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

GSWS 0550 - SEX AND SEXUALITIES

Minimum Credits: 3
Maximum Credits: 3
How and why did sex and sexuality become subjects of study? How are our experiences of sex and sexuality shaped by a history of 'scientific' explorations of desire? Why has sexuality become so central to our understandings of identity? What was sex like before 'sexuality' was invented? This seminar explores these questions by approaching sex and sexuality as socially, historically, and culturally contingent concepts. We will consider sex and sexuality as they are related to other categories of identity, including race, class, ethnicity, nation, and ability. Our theoretical and historical investigations will create the groundwork for understanding and rethinking how sexuality is understood in culture today.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

GSWS 0600 - GLOBAL LGBTQ LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will survey global LGBTQ literature. We will read novels, short stories, poetry, and/or plays from a variety of different locations with a strong focus on non-Western texts. We will also read key works in literary analysis, LGBTQ theory, postcolonial theory, critical race studies, and global studies. The variety of reading will allow us to engage with different approaches to LGBTQ literature, and it will introduce you to the various ways that nation and culture shape literary production. Students will be able to identify key methods in literary analysis upon completion of the course. Seminar discussions will focus on the use of key terms and theories as well as the development of research skills so that students will be prepared to produce written research on global LGBTQ literature.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

GSWS 0610 - QUEER AND FEMINIST MEDIA ART

Minimum Credits: 3
Maximum Credits: 3
This course develops students' understanding of diversity and will build that understanding through the production of creative work relating to media art that is focused on gender and sexuality. Looking at the different ways that people express their gender and sexuality using media - including but not limited to: video and film, digital media, images, analog media, etc. - this course surveys the diverse ways that people express their sexuality and gender through creative expressions that are also connected to social change, resistance, and difference. Surveying a wide range of queer and feminist media, the course asks students to examine the relationship between gender, sexuality and colonialism, race and racialization, ethnicity, globalization,

religion, and nationalism through the formats of creative expression. The course draws heavily on building creative assignments on topics relating to gender and sexuality, including self-reflexive projects that ask students to think about their own relationship to these categories through creative mediums. Class assignments are designed to connect analytic tools from readings and class analysis of media objects to the creative process of making media art works. Students will also create art works in the class, such as making their own animated GIF, a performance video, and a final media project, all paired with reflexive writing assignments.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Grad LG/SNC Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

GSWS 1130 - GENDERED BODIES

Minimum Credits: 3
Maximum Credits: 3
For centuries, the biological sciences have embraced the human body as a product of nature in need of study, measurement, and treatment. Much of this knowledge has contributed to discourses of "normal" and "healthy" bodies. However, contemporary social science and feminist perspectives offer alternative readings of the human body as a social construction based upon cultural conventions and perceptions of gender, race, class, and sexuality. As Lorber and others have argued, "the result is a gendered body, produced for a gendered social world." This class will examine a wide variety of gendered social constructions of the human body at work, in sports, and in media images that reflect standards and ideals of "beauty," "health" and "deviance." We will also consider the meaning of gendered bodies in light of contemporary technologies - such as plastic surgery, steroids, infertility treatments - that help to reveal the ways in which males, females, and "others" become "men" and "women."
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GSWS 1140 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This upper-level course addresses a current topic in gender, sexuality, or women's studies. Topic varies by instructor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GSWS 0100 or 0200 or 0500 or 0550; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Gender, Sexuality & Women's Studies, Writing Requirement Course

GSWS 1141 - SPECIAL TOPICS IN GENDER, SEXUALITY, AND WOMEN'S STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course will treat a specific topic in gender, sexuality, and/or women's studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Gender, Sexuality & Women's Studies

GSWS 1150 - TRANSNATIONAL FEMINISMS

Minimum Credits: 3
Maximum Credits: 3
This class will look at the situation of women in international perspective. We will examine how feminist organizations operate in difficult national and local contexts and how women's rights have been addressed through international organizations such as the united nations and the world court. Through case studies, we will consider a number of contentious issues in global feminism, including sexual assault, sex tourism, and the global assembly line, and the role of feminism in national liberation movements.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Gender, Sexuality & Women's Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GSWS 1170 - QUEER THEORY

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to theories of how people think about and enact genders and sexualities. The course edicts both the assumption that people are naturally or normally heterosexual and the idea that being seen as "normal" should be the political or personal goal of sexual minorities. The course calls into question the idea of normal exploring how gender aims to ""normalize"" people by categorizing them. In recognizing the ruse of normality, the course examines sexual practices and gender expressions not attempting to dignify, deny or apologize for them.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Gender, Sexuality & Women's Studies

GSWS 1180 - POLITICS OF GENDER AND FOOD

Minimum Credits: 3
Maximum Credits: 3
Food is sustenance and absolutely essential to life. But food is never simply about nutrition. Because it is fundamental to the human experience, food is also a medium for the expression of culture and social identity. Moreover, food relays complex social messages about gender, sexuality, and family. Consequently, food is also a means for expressing the social and symbolic use of power and control in which social inequalities are expressed in culinary forms. This course will examine food from the vantage point of gendered systems of production, distribution, and consumption as we consider: How does your food come to your table (or not) and what are the political implications of personal tastes? By the end of this course, students will be able to: 1) apply anthropological and feminist theories to food and eating in a cross-cultural perspective; 2) understand how gender, race and class influence our access to and perspective on food; and 3) make connections between eating and cultural identities and beliefs.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GSWS 1190 - MASCULINITIES

Minimum Credits: 3
Maximum Credits: 3
An interdisciplinary examination of theories and select cultural constructs of masculinity, as related to and distinct from male bodies. Masculinity will be considered in its relation to race, ethnicity, nation, class, ability, and sex. Readings will likely come from literary studies, film studies, cultural studies, sociology, anthropology, linguistics, history, and other fields.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GSWS 0100 or GSWS 0500 or GSWS 0550 or Instructor Consent
Course Attributes: DSAS Diversity General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Diversity General Ed. Requirements

GSWS 1200 - TRANSGENDER STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the interdisciplinary field of transgender studies. The course is first and foremost about trans contributions to our shifting understandings of sex, gender, identity, and the body in theory, culture, art, psychology, science, and activism. Some of the topics we will examine include: the history and emergence of transgender theory, global understandings of trans issues, feminist/queer encounters with trans theories, the politics of trans visibility, and trans lives in film and literature. The course will cover major topics within the discipline, including queer/trans "border wars," intersectional approaches in trans theory, the various meanings and uses of "trans" in different disciplines, and the relationship between trans theories and existing models of sex, gender, and sexuality. We'll pay close attention to how transgender studies has challenged and/or enhanced thinking in feminist and queer theory.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GSWS 0100 or GSWS 0200 or GSWS 0500 or GSWS 0550 or Instructor Consent
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements

GSWS 1210 - GENDER AND THE DIGITAL

Minimum Credits: 3
Maximum Credits: 3
This course will explore the relationship between identity, media, and digital culture, specifically how gender is constructed and contested through

forms of media. Students will consider how media also informs notions of race, class, sexuality, religion, and ethnicity, among other identity markers. This course will rely on thoughtful and academically stimulating analyses of media, such as television, film, music, advertising, online spaces, video games, among others, and in various combinations.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GSWS 0100 or 0200 or 0500 or 0550

GSWS 1220 - WOMEN OF COLOR FEMINISM

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

GSWS 1280 - TRANSNATIONAL SEXUAL POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course develops students' understanding of diversity and global issues in relation to sexuality and sexual identities in a transnational context. More than just assuming that sexuality and sexual identities are stable across different historic periods and geo-political contexts, this course approaches sexuality and sexual politics from the perspective that there are diverse ways that people express their sexuality across time and place, and that these expressions are embedded in politics of contestation, resistance, and liberation connected to histories of colonialism and contemporary conditions of globalization. Looking at social movements, global conflicts, violence, activism, and socio-legal frameworks, the course investigates how sexuality, sexual identities, and sexual politics are much more diverse across the globe than popularly understood. Looking specifically at the relationship between sexuality and colonialism, race and racialization, gender identity, ethnicity, globalization, neoliberalism, and citizenship, the course introduces students to texts that interrogate the assumption that sexuality is stable, coherent, or universal; instead, these texts argue that sexuality is diverse across history and geography, and a key facet of both human self-expression and global politics.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GSWS 1300 - WANDERLUST: SEX & GENDER IN GLOBAL TOURISM

Minimum Credits: 3
Maximum Credits: 3
Tourism is among one of the world's largest industries, generating trillions of dollars in revenues and employing millions. It is heavily relied upon as an economic strategy for developing countries. This course will examine the gendered cultural practices of travel and the impact tourism has on both host and guest communities. Leisure activities were once deemed unimportant topics for study. However, tourism has been a central dimension of globalization, and it can be used as a lens to reflect on many questions about identity and heritage, commoditization, historical and cultural representation, authenticity and ownership, neoliberalism, inequality, gender relations, environmental sustainability, and more. We will examine various forms of tourism, including, but not limited to: ethnic, historical, regional, and ecotourism. We will pay close attention to health and medical tourism, a growing phenomenon in today's global world. Themes of the gaze, authenticity, identity, consumption, ritual, borders, and pilgrimage will be considered throughout the term especially with regard to the ways in which they simultaneously draw upon and reconstruct notions of the "Other" that are built upon social constructions of gender, race, class, sexuality, age, ability, etc. There are no prerequisites for this course, although GSWS 0100: Introduction to Gender, Sexuality, and Women's Studies; GSWS 0500: Introduction to Feminist Theory; or another course on gender is recommended.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Global Issues General Ed. Requirement

GSWS 1450 - GENDER AND SUSTAINABILITY

Minimum Credits: 3
Maximum Credits: 3
This course will critically analyze sustainability from gendered perspectives. It will take a three-pronged approach to the study of sustainability and gender, engaging with the economic, social, and environmental components that contribute to our understandings of sustainability and sustainable development. Through readings, written assignments, and class discussions, students will examine the intersectionality of gender and sustainability with class, race, ability, age, nationality, religion, power, politics, social movements, and health from local and global perspectives. Students will

critique practical applications of sustainable development and the role of gender in creating a more sustainable future. Taking an interdisciplinary approach, this course will draw on perspectives from anthropology, sociology, environmental studies, gender and development, human geography, public and international affairs, political science, economics, engineering, geology, business, urban studies, and a range of health sciences. Students will have the opportunity to learn about gender and sustainability through case study analyses stemming from a variety of geographic regions. There are no prerequisites for this course, although GSWS 0100 Introduction to Gender, Sexuality and Women's Studies, GSWS 0500 Introduction to Feminist Theory or another course on gender is recommended.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, Gender, Sexuality & Women's Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GSWS 1460 - GENDER, SEXUALITY, AND CHILDHOOD IN A GLOBAL CONTEXT

Minimum Credits: 3
Maximum Credits: 3
Although childhood is often conflated with a biological category based on an immature body, in reality it is much more. Instead, this course examines the ways in which childhood is a discursive and continuously shifting category, one that changes across time and place. This course will introduce students to the study of children and childhood in a cross-cultural context and will pay particular attention to the ways in which notions of childhood, and the experience of being a child, draw from and reproduce understandings of gender and sexuality as they intersect with race, class, ethnicity, etc. Through readings, lectures, and films, we will also consider the meaning of gendered childhoods in light of contemporary forms of conception, children's culture (media, toys and artifacts, stories), child labor and play, and ritual and coming of age ceremonies. An analysis of these contemporary phenomenon highlight local and regional notions of childhood and their intersection with broader global patterns. In addition to lectures, a portion of each class will be devoted to group discussions in which students are encourage to engage with the course readings. Students will give presentations and assist with discussion facilitation. We will also view films. Evaluations will be based on the student's participation in these discussions, as well as two exams, and a series of four writing assignments.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GSWS 1470 - GENDER & CITIZENSHIP IN EUROPE

Minimum Credits: 3
Maximum Credits: 3
This Study Abroad course analyses womenâs claims for citizenship throughout twentieth and early twenty-first century Europe from a variety of perspectives. By 1945, the majority of women in Europe had been enfranchised, yet as women demanded to exercise the rights of citizenship, they frequently faced limitations upon their rights as citizens based on gender. This course charts the ways in which women have adapted to and attempted to challenge the ideological, political and material conditions of citizenship in modern Europe. Topics to be examined include: women's political activism; citizenship and warfare; consumer citizenship; sexuality and reproductive rights; and citizenship within the context of multicultural society. Classes are arranged both chronologically and thematically, and will combine contextual lectures, seminars, and presentations in order to facilitate discussion. The course is organized around three key themes: Women, Regulation and the State; Gender Discourses; and Citizenship and Womenâs Activism. Each of these themes is designed to allow students to engage with a wide array of historical and contemporary sources including: personal narratives, political essays, representations of women in art, fiction, and the contemporary media, and a variety of field studies based in London.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GSWS 1692 - LGBTQ IN THE USA

Minimum Credits: 3
Maximum Credits: 3
With growing contemporary interest in LGBTQIA issues and student activism surrounding gender identity and sexuality, this course provides necessary historical context for understanding such political and cultural phenomena in 20th-century U.S. history. It charts the trajectory of different identities and sexualities (too often classified as transgressive or deviant) from the beginning of the century through post-World War II efforts to seek greater freedom and inclusion in American society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GSWS 1900 - INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
An opportunity to extend academic training to a practical work experience in an area where the student has gained some expertise.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Gender, Sexuality & Women's Studies, Writing Requirement Course

GSWS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
A variety of individual research and reading projects may be undertaken under the supervision of a core faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: Gender, Sexuality & Women's Studies

GSWS 1902 - UNDERGRADUATE RESEARCH

Minimum Credits: 1
Maximum Credits: 3
Undergraduate students engage in research projects under the direction of a core faculty member. Consent of instructor required.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

GSWS 1910 - CAPSTONE

Minimum Credits: 3
Maximum Credits: 3
Designed as a capstone, this course is a seminar that allows students to explore feminist theory and methodology in greater depth. We will pay particular attention to the current state of feminist theory as we consider future directions and challenges, and address the ways in which feminist theories and methodologies can inform research in other disciplines. Students will respond to a series of intense readings that focus on the intersections of feminist theory with other theoretical approaches, such as queer theory, environmental ethics, and critical race theory, among others. Using this theoretical foundation, students will construct a research project of their own design that will apply academic work to a "real world" setting and prepare students for careers and/or graduate study.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GSWS 0100 or 0500
Course Attributes: Capstone Course, Gender, Sexuality & Women's Studies

Geology

GEOL 0055 - GEOLOGY LABORATORY

Minimum Credits: 2
Maximum Credits: 2
The course consists of a laboratory structured to give students an overview as well as hands-on experience with the methodology used by earth scientists to study geologic processes.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: GEOL 0800 or 0820 or 0860 or 0840

GEOL 0060 - HISTORY OF THE EARTH

Minimum Credits: 4
Maximum Credits: 4
This course surveys the evolution of the earth and its inhabitants from its origins to the present. Lectures and lab emphasize the identification and interpretation of rocks, geologic features, and geologic maps. Lab work also includes fossil identification, stratigraphic correlation, and sedimentary facies analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 0055
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0800 - GEOLOGY

Minimum Credits: 3
Maximum Credits: 3
Geology is the study of how the earth works. This class covers the classification and origin of basic rocks and minerals; examines the role of plate tectonics in shaping the earth and producing such hazards as earthquakes and volcanoes; and examines the forces that shape beaches and rivers and sometimes threaten our lives and property. We also survey the evidence for changing climate and the future of such resources as groundwater, fossil fuels, and ores.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0802 - GEOLOGY OF THE NATIONAL PARKS

Minimum Credits: 3
Maximum Credits: 3
The magnificent scenery of the national parks provides a backdrop to an exploration of the basic geological principles that govern the creation and development of landscapes. The geological history of the North American continent will be explored in order to provide a framework in which to understand the development of the landscapes of our country.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0820 - NATURAL DISASTERS

Minimum Credits: 3
Maximum Credits: 3
The geologic, hydrologic and atmospheric processes that impact the human environment in catastrophic ways are examined in this course. Natural disasters surveys energy cycles, plate tectonics with an emphasis on how they produce earthquakes, volcanic eruptions, tornadoes, hurricanes, tsunamis, wildfires, flooding, landslides, climate change and mass extinctions. Students will get hands on experience in recitation. This course serves as an introductory course for three majors in geology and planetary science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0840 - ENVIRONMENTAL SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This class is an interdisciplinary introduction to the science underlying environmental issues. Focusing on the principles of geology, biology, and chemistry and in their application to human impacts on the environment, strategies for sustainable management of environment and natural resources, and global change.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0850 - NATURAL SCIENCES 1

Minimum Credits: 3
Maximum Credits: 3
This 2-semester course will present non-science majors with a comprehensive picture of the natural world. Topics will include: the solar system; laws of motion; energy; structure of matter; the earth; cosmology; the science of living things; the living cell; genetics; evolution. Emphasis will be on fundamental concepts that underlie our present understanding. Connections will be made to historical developments and to scientific and technological issues that impact individuals and society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GEOL 0860 - ENVIRONMENTAL GEOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course takes an integrated earth systems approach to understanding our planet and its resources. We will investigate geologic processes and hazards (e.g., earthquakes, volcanoes, landslides, and weather hazards), geologic resources (water, soil, minerals, energy) and the local and global ramifications of human interaction with the earth (e.g., air, soil and water pollution, ozone depletion, and climate change). This course also serves as an introductory course for three majors in the department of geology and planetary science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0870 - THE PLANETS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the worlds of our solar system. We will make extensive use of the most recent and dramatic images to discuss the nature, origin, and history of the planets and moons of our solar system
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0871 - INTELLIGENT LIFE IN THE UNIVERSE

Minimum Credits: 3
Maximum Credits: 3
This course attempts to answer the question of whether intelligent life exists elsewhere in the galaxy by considerations of the origin and subsequent evolution of the universe, our solar system, terrestrial life, and the human species.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 0890 - OCEANOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
The oceans play a central role in global climate and supporting a stunning diversity of life. This survey of oceanography examine the major physical, chemical, and biological processes that shape the modern oceans and the life they contain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

GEOL 1001 - MINERALOGY

Minimum Credits: 4
Maximum Credits: 4
Physics and chemistry of minerals. Includes physical properties, crystal chemistry, crystal structure and symmetry, mineral identification using a petrographic microscope, and the processes of mineral formation and breakdown.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CHEM 0110 and GEOL 0055

GEOL 1002 - HUMAN DRIVEN GLOBAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the quantification of human activities and human environmental impacts that form the basis for scientific inquiry in the `Anthropocene.¿ The course will emphasize both reconstruction of early human activities from environmental records (e.g., the advent of soil erosion or mining from sediment records) and analysis and interpretation of modern ¿big-data¿ resources (e.g., transformation of census records to chemical fluxes). Class examples and problems will focus on policy relevant facets of human activities, ranging from nutrient budgets to carbon dynamics to water and sediment fluxes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: GEOL 1030 and GEOL 1445

GEOL 1003 - IGNEOUS & METAMORPHIC PETROLOGY

Minimum Credits: 4
Maximum Credits: 4
A lecture and laboratory course concerned with a study of the origin, occurrence, identification, and classification of igneous and metamorphic rocks. The primary purpose of the course is to familiarize the student with the physical and chemical processes that control the formation of the main igneous and metamorphic rock types.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 1001

GEOL 1006 - ENVIRONMENTAL MODELING

Minimum Credits: 3
Maximum Credits: 3
Models allow scientists and others to represent features and behaviors of environmental systems in order to promote inquiry, develop insight, test hypotheses, and consider solutions to problems. The class will use primary literature and hands on experiences with computer models to introduce environmentally relevant modeling tools. Topics covered will include process-based models of disease, climate, ice, ecosystems, ecosystem services, hydrology, predator-prey systems, and competition among species for resources. Students will have the opportunity to conduct original research projects either by developing their own environmental model or by using existing models. No programming experience is required. Students should have some upper level undergraduate coursework in environmental studies.science, biology, geology, physics or chemistry and be comfortable thinking quantitatively.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0220; PLAN: Geology, Environmental Studies, Environmental Geology, or Environmental Science

GEOL 1015 - GEOLOGY COLLOQUIUM

Minimum Credits: 1
Maximum Credits: 1
Geology colloquium is open to undergraduate students in geology and planetary science. It is a formalization of the seminar series with weekly guest speakers from industry, academia and government. Each seminar will focus on a different research topic in earth sciences describing on-going projects of interest to students. The course may be taken multiple times.
Academic Career: Undergraduate
Course Component: Colloquium
Grade Component: Satisfactory/No Credit

GEOL 1020 - SEDIMENTOLOGY AND STRATIGRAPHY

Minimum Credits: 4
Maximum Credits: 4

Sedimentology is the study of the processes that produce modern and ancient sedimentary deposits. The lectures will focus on a variety of modern sedimentary systems (rivers, deltas, beaches, etc.) As well as their ancient equivalents. The class culminates with an exploration of how long-term changes in sediment supply and sea level act to shape regional-scale sedimentary sequences. The lab focuses on rock identification and interpretation and on a variety of stratigraphic problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 0055 or 1001

GEOL 1030 - THE ATMOSPHERE, OCEANS AND CLIMATE

Minimum Credits: 3
Maximum Credits: 3
This course will examine the atmospheric and oceanic interactions that determine the nature of the global climate system. Specifically, the course will explore the origin, evolution, and structure of the earth's oceans and atmosphere, the earth's energy balance, atmospheric circulation patterns, and surface and deep ocean currents. The course will also consider records of past climate, evidence for recent warming, climate change projections, and climate change policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

GEOL 1045 - STATISTICS FOR EARTH SCIENCE

Minimum Credits: 3
Maximum Credits: 3
A statistics course geared toward environmental science and geology majors with an emphasis on applying data analysis and statistical techniques to environmental data. Topics will include: visualizing data, summary statistics, correlation, selected parametric statistics (t-tests, general linear models), selected non-parametric methods, statistical inference, and experimental design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: STAT 0200 or STAT 0800 or STAT 1000 or STAT 1100

GEOL 1050 - SURFACE WATER HYDROLOGY

Minimum Credits: 4
Maximum Credits: 4
This course shall provide an Earth systems science overview of the processes that govern the hydrologic cycle including precipitation, evapotranspiration, runoff and discharge, infiltration, and groundwater. The course shall emphasize the movement of water through the atmosphere, over the land surface, and within the unsaturated and saturated zones.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (GEOL 0800 or 0820 or 0840) and (MATH 0120 or 0220)

GEOL 1051 - GROUNDWATER GEOLOGY

Minimum Credits: 4
Maximum Credits: 4
This course focuses on physical and chemical processes controlling water movement and composition in sub-surface environments. The lab focuses on practical field methods for the characterization of groundwater.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: GEOL 0055 and CHEM 0110 and (MATH 0120 or MATH 0220)

GEOL 1052 - PALEOCLIMATOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course presents the different types of data used to study the earth's climatic history and long-term climatic variability. Particular emphasis is

given to the climatic changes during the late Cenozoic -- the so called glacial ages. Topics of discussion include time scales of climatic change, types of paleoclimatic records and their limitations, numerical climate models, the causes of climatic change, and the importance of paleoclimatic research in forecasting the future.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 0055

GEOL 1055 - ENVIRONMENTAL ETHICS

Minimum Credits: 3
Maximum Credits: 3
This course asks students to evaluate environmental decision-making, land-management, and use of natural resources by investigating the underlying assumptions of discussions with in the fields of science, management, economics, law, religion and public policy on the environment. Throughout the semester, we will discuss our historical and current day evolution toward Land Ethic.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GEOL 1056 - UHC ENVIRONMENTAL ETHICS, SCIENCE AND PUBLIC POLICY

Minimum Credits: 3
Maximum Credits: 3
This course examines the interrelationships among environmental science, ethics, and policy. It covers such topics as origin and development of the environmental movement, environmental values and attitudes, enactment and mechanics of environmental regulations and statutes, environmental economics and politics, and future environmental scenarios.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)
Course Attributes: Capstone Course, University Honors Course

GEOL 1060 - GEOMORPHOLOGY

Minimum Credits: 4
Maximum Credits: 4
This course is a survey of the major landform features found on the earth's surface. Each landform type is first described qualitatively and then examined in terms of the processes, such as stream flow or glacial activity, which cause its development. The purpose of the course is to familiarize students with geomorphic principles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 0055

GEOL 1062 - GEOMORPHOLOGY: DYNAMIC EVOLUTION OF EARTH'S SURFACE

Minimum Credits: 4
Maximum Credits: 4
This course aims to introduce students to the geomorphologic processes that shape the surface of Earth, the physical mechanisms by which they operate, and the landforms they create. It will combine qualitative and quantitative descriptions of land-shaping processes such as river erosion, glaciers motion, and landslides. The course builds on in class discussions and assignments to train students in applying basic physical and mathematical tools to explore geomorphological processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

GEOL 1100 - STRUCTURAL GEOLOGY

Minimum Credits: 4
Maximum Credits: 4
A course devoted to the study of folded, faulted, flowed, sheared, and jointed rocks with the aim of preparing a student to recognize and interpret deformed rocks. The evolution of mountain belts and deformation related to this process are emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 0055; CREQ: GEOL 1003 and (GEOL 1020 or ANTH 1520)

GEOL 1240 - VERTEBRATE PALEONTOLOGY

Minimum Credits: 3
Maximum Credits: 3
This class focuses on the evolution and extinction of the vertebrates. We will first examine the normal processes of evolution and extinction and how they are reflected in the fossil record. We will then begin a tour of the fossil record supplemented as necessary with insights from living organisms. We will begin our deep dive into the past by examining what is known about the origin of our phylum. We will then survey the amazing diversity of fishes, amphibians, mammal-like reptiles, dinosaurs, and mammals over the next half billion years. We will focus throughout on transitional fossils and the various processes that have driven evolution and extinction over time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GEOL 1300 - ENVIRONMENTAL EDUCATION FOR SOCIAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
Earth's human population has reached 7.5 billion and continues to grow rapidly. As concerns heighten over the ability of the planet to support and sustain life, it is becoming ever more important that we understand the crucial relationship between nature and society. This course seeks to use South Africa, one of the most culturally and environmentally diverse countries in the world, as an outdoor classroom to highlight the challenges, solutions and negotiations that are central to sustaining life on Earth. By immersing students in diverse communities that showcase unique perspectives, facilitating real-world experiences, actively engaging with South African citizens including students, this course will provide participants with skills, experiences and diverse perspectives that are crucial to supporting innovative problem solving and decision-making long after the course is over. By taking this course, students will have the opportunity to use one of the most culturally and environmentally diverse countries in the world, South Africa, to: o Actively engage with a variety of South African communities to enhance critical assessment of globally-relevant social and environmental challenges Examine the multiple ways in which socio-environmental challenges impact different cultures Reflect upon how culture and traditions impact environmental education and social change in urban spaces (e.g. Cape Town, South Africa and Pittsburgh, PA, USA)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Pitt in South Africa Study Abroad Program. MIN GPA: 2.75 (2.5 for Engineers); Pitt Students must have completed 24 credits on a Pitt Campus; Clear Judicial Record, Open to Non-Pitt students, and students from all Pitt campuses
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, Study Abroad

GEOL 1308 - SUSTAINABLE AGRICULTURE AND FOOD SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This is an interdisciplinary course that examines the environmental, social, and economic dimensions of agriculture, and relevant emerging challenges involving climate change, and resource depletion and degradation, particularly in tropical environments. It treats the Green Revolution, capital intensive/high-input practices, and corporate agriculture. Students will learn about the implications of "conventional" agriculture for the environmental protection, and food systems, security, and sovereignty. Additionally, students will explore the principles and practice of alternatives, including integrated crop and pest management, agroforestry, permaculture, plus organic, sustainable, and "climate smart" agriculture. Using a framework of "systems thinking", and drawing analogies between agricultural and ecological systems, the course explores the multiple drivers, inputs, and outputs of agricultural production and trade. Students will have firsthand, immersive experiences with production systems that are wide-ranging, and will explore the costs and benefits of each, through the lens the environment, economy, and society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

GEOL 1312 - ENVIRONMENTAL LAW AND POLICY

Minimum Credits: 3
Maximum Credits: 3
The survey course will examine the role of law and policy in regulating human impact on the environment. topics include the history and development of U.S. environmental law; theoretical approaches to environmental protection; mechanisms employed in environmental laws and regulation; the roles of the legislative, executive, and judicial branches of government in developing and implementing environmental law and policy; an overview of the principal environmental laws at the federal and state levels; the role of citizens in development and enforcement of environmental law; and constitutional constraints on government authority.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

GEOL 1313 - COM ENVIRONMENTAL PROFESSIONALS

Minimum Credits: 3
Maximum Credits: 3
This course serves as a w-course for environmental studies. We will sample various tools and methods (typical "professional" tasks such as memos and letters, building into comprehensive assignments such as case studies), all while concentrating on how audience and purpose affect communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); PLAN: Environ-Geology (BS, BPH) or Environ-Studies (BA, BPH) or Geology (BS, BPH) or Environ-Science (BS)
Course Attributes: Writing Requirement Course

GEOL 1314 - PEOPLE, PLACE AND CULTURE: ENVIRONMENTAL DEBATES IN AUSTRALIA, NEW ZEALAND AND THE PACIFIC

Minimum Credits: 3
Maximum Credits: 3
This course explores the multi-faceted dimensions of human interaction with diverse environments in Australia, New Zealand and the Pacific to illuminate the origins of environmental concerns and current debates in these regions from pre-European contact to now. From the peopling of the Pacific to the challenge of climate change, this course is broad in its scope while concentrating on selected issues such as the impact of mining, clean energy futures, our vulnerability to 'natural' disasters and increasing urbanization. In so doing, the intersection of culture and nature is explored. The course is embedded in the environmental humanities, but uses the approaches of environmental history, as well as insights from the disciplines of science, politics, sociology and cultural studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Study Abroad

GEOL 1315 - COMMUNICATION IN GEOSCIENCES/WRIT REQUIREMENT

Minimum Credits: 3
Maximum Credits: 3
This class is perfect preparation for undergraduate research or graduate school. It will introduce students to the main scientific journals, how to read and assimilate the scientific literature, discuss how to give oral presentations, and address how to write clear scientific papers. Students will also explore topics of potential interest that they either propose or select from a provided list.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: GEOL 0060 or 1003 or 1020 or 1030 or 1051 or 1060 or 1515 or 1100 or 1641; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

GEOL 1330 - SUSTAINABILITY FLASH LAB

Minimum Credits: 3
Maximum Credits: 3
Sustainability involves a systems approach. By exploring the inputs and outputs of energy and resources, we will ask broad questions: How do we measure production and consumption? How do geographical and socio-economic environments affect these things? How do we go beyond traditional measurements to quantify more comprehensive impacts and life-cycles? Answering these larger questions begins on a smaller, very specific, and

personal scale: Where you live, and how you live. By examining and measuring resource use (including electricity, water and sewage, garbage and recycling, energy use, and transportation), we trace inputs and outputs to their source/destination, and begin to unravel and understand the complex web of production, distribution, delivery, and environmental consequences. We will investigate how these metrics change due to location and societal practices, as well as changes created through conservation and public policy. Eventually, it is the aim of this course to also reflect, at cultural and philosophical levels, on our energy/resource usage and underlying causalities thereof.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

GEOL 1331 - HEALTH AND SAFETY (HAZWOPER)

Minimum Credits: 3
Maximum Credits: 3
Hazwoper (hazardous waste operations and emergency response) is a 40-hour course that promotes awareness of safety and response plans for those who may work with chemical and other hazards in the work-site. Students will learn how hazardous materials are handled and identified; human responses to exposure; learn what to do in case of site emergencies; use appropriate safety methods and work practice controls; and understand labels that are used to alert personnel of danger involving hazardous material. (Many employers in environmental consulting firms and other industries require 40-hour osha training.) The course will count as an elective in the environmental studies major.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1332 - ENVIRONMENTAL ADVOCACY AND ACTION

Minimum Credits: 3
Maximum Credits: 3
Environmental Advocacy is much more than simply advocating. To be effective, you must also take Action, and although "enthusiasm" goes a long way, volunteers and professionals alike need a wide range of skills in order to make a lasting impact. This includes planning successful events, running effective meetings, communicating science, writing grants, accounting & mind-numbing IRS paperwork, avoiding burn-out, and dealing with the media, volunteers, government and people who don't agree with you. It can be overwhelming even to those who know what to expect! And don't forget about the actual goal: Making a difference. This course covers the "inner workings" of environmental advocacy. We go beyond the slogans, logos, direct mail, and big events to study what's behind the nonprofit world, what it takes to succeed at the grassroots. Speakers from the Pittsburgh environmental community will share their experiences, concerns, and perspectives most weeks, and a wide range of readings and assignments are designed not only to have students take a deep look, but to experience some of this world, too.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1333 - SUSTAINABILITY

Minimum Credits: 3
Maximum Credits: 3
Sustainability is a term that has many meanings, depending on who's using it, and we will cover most of them in this class, from green campuses to green-washing. The class features guest speakers from the academic, governmental, nonprofit and business sectors to offer as many perspectives as possible on sustainability topics. The real focus of the class, though, is the development of sustainability projects on campus and in the Pittsburgh community. Students also participate in sustainability-related events and field trips with the opportunity to present their work to a larger audience at the end of the semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1335 - ENVIRONMENTAL ISSUES: AIR QUALITY

Minimum Credits: 3
Maximum Credits: 3
Pittsburgh has had a checkered past when it comes to air quality issues, and faces an uncertain future. Once known as "hell with the lid off" due to industrial emissions, Pittsburgh and its environs once had some of the worst air in the nation. In 1948, a noxious cloud killed 22 in nearby Donora

and sickened thousands. But Pittsburgh also became one of the first American cities to pass legislation aimed at cleaning its air. Today it faces a new threat from emissions from coal-burning utilities in Ohio and west Virginia. This course is one in a series that focuses on the history, progress and current events of environmental issues in southwestern Pennsylvania that also have application throughout the region and U.S. emphasis is on a balanced presentation of the issues, discussions of various approaches to solving problems and development of writing skills. To accomplish this, the course will (1) focus on a single environmental issue, (2) structure individual classes around a single aspect of that issue, (3) feature guest lectures and presentations by government regulators and policymakers, interest groups, corporate leaders and experts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1336 - ENVIRONMENTAL ISSUES: AIR QUALITY (W)

Minimum Credits: 3
Maximum Credits: 3
This course is the same as GEOL 1335, but it fulfills the University Writing Requirement. Pittsburgh has had a checkered past when it comes to air quality issues, and faces an uncertain future. Once known as "hell with the lid off" due to industrial emissions, Pittsburgh and its environs once had some of the worst air in the nation. In 1948, a noxious cloud killed 22 in nearby Donora and sickened thousands. But Pittsburgh also became one of the first American cities to pass legislation aimed at cleaning its air. Today it faces a new threat from emissions from coal-burning utilities in Ohio and west Virginia. This course is one in a series that focuses on the history, progress and current events of environmental issues in southwestern Pennsylvania that also have application throughout the region and U.S. emphasis is on a balanced presentation of the issues, discussions of various approaches to solving problems and development of writing skills. To accomplish this, the course will (1) focus on a single environmental issue, (2) structure individual classes around a single aspect of that issue, (3) feature guest lectures and presentations by government regulators and policymakers, interest groups, corporate leaders and experts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environ-Geology (BS, BPH) or Environ-Studies (BA, BPH) or Geology (BS, BPH) or Environ-Science (BS); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

GEOL 1337 - ENVIRONMENTAL ISSUES: WATER QUALITY

Minimum Credits: 3
Maximum Credits: 3
This course will focus on environmental issues related to water quality, including the effects of Marcellus Shale waste water on public and private drinking water supplies. The emphasis will be on southwestern Pennsylvania, but we'll look at the effects of Marcellus Shale industry operations on a state and regional basis too. Emphasis is placed on a balanced, in depth presentation of the issues that must be addressed to realistically solve modern environmental problems. This will be accomplished by (1) focusing on a single environmental issue of relevance to southwestern Pennsylvania (2) structuring weekly sessions around a single aspect of that issue, and (3) giving students an opportunity to learn about the issues from local professionals and community leaders active in these fields.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1338 - ENVIRONMENTAL ISSUES: WATER QUALITY (W)

Minimum Credits: 3
Maximum Credits: 3
This course is the same as GEOL 1337, but it fulfills the University Writing Requirement. This course will focus on environmental issues related to water quality, including the effects of Marcellus Shale waste water on public and private drinking water supplies. The emphasis will be on southwestern Pennsylvania, but we'll look at the effects of Marcellus Shale industry operations on a state and regional basis too. Emphasis is placed on a balanced, in depth presentation of the issues that must be addressed to realistically solve modern environmental problems. This will be accomplished by (1) focusing on a single environmental issue of relevance to southwestern Pennsylvania (2) structuring weekly sessions around a single aspect of that issue, and (3) giving students an opportunity to learn about the issues from local professionals and community leaders active in these fields.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environ-Geology (BS, BPH) or Environ-Studies (BA, BPH) or Geology (BS, BPH) or Environ-Science (BS);

PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

GEOL 1339 - ENVIRONMENTAL ISSUES: MINING AND GAS DRILLING ISSUES

Minimum Credits: 3
Maximum Credits: 3
This term's focus is on mining issues. Mining and oil and gas extraction has a long, important and sometimes dark history in Pennsylvania. Almost since the first black chunk was pried from the first mine, coal has been king in the keystone state. It has fueled industries, heated homes, and powered trains and river tugs. It has been politically powerful. It has also colored streams, creeks and rivers orange and left them dead. It has scarred the rolling Allegheny hills, first with strip mines and now with "valley fills." how is mining's environmental legacy being addressed? How effective are current laws in regulating the industry? What's the latest, best, mining technique, and what is its public impact? What has been industry's response? What impacts,"
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1340 - ENVIRONMENTAL ISSUES: MINIING AND GAS DRILLING ISSUES (W)

Minimum Credits: 3
Maximum Credits: 3
This course is the same as GEOL 1339, but it fulfills the University Writing Requirement. This term's focus is on mining issues. Mining and oil and gas extraction has a long, important and sometimes dark history in Pennsylvania. Almost since the first black chunk was pried from the first mine, coal has been king in the keystone state. It has fueled industries, heated homes, and powered trains and river tugs. It has been politically powerful. It has also colored streams, creeks and rivers orange and left them dead. It has scarred the rolling Allegheny hills, first with strip mines and now with "valley fills." how is mining's environmental legacy being addressed? How effective are current laws in regulating the industry? What's the latest, best, mining technique, and what is its public impact? What has been industry's response? What impacts, what's different and the same about the latest extractive industry in the state: Marcellus Shale natural gas development. Guest speakers from industry will be scheduled."
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environ-Geology (BS, BPH) or Environ-Studies (BA, BPH) or Geology (BS, BPH) or Environ-Science (BS); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

GEOL 1341 - ENVIRONMENTAL ISSUES: PARKS AND FORESTS

Minimum Credits: 3
Maximum Credits: 3
This course is one in a series that focuses on environmental issues in southwestern Pennsylvania. Forests are made up of trees. "Timber " is what they yell when the trees are cut and fall. With maturing forests scraping the sky in Pennsylvania and other parts of the northeastern united states, and controversial restrictions on national forest timbering in the pacific northwest, there is tremendous pressure to cut the local hardwood forests. But unlike the turn of the century when all of Penn's woods was clear-cut, there is a growing ethic that believes trees are more valuable growing than cut - for recreation and environmental reasons. This course on forest and parks issues is the fourth in a series that focuses on environmental and public policy issues in south western Pennsylvania. Through newspaper articles, field trips and guest speakers, the course will explore the issues and conflicts that abound in our wildlands and urban woods. Emphasis is on a balanced presentation of the issues, discussions of various approaches to solving problems and development of writing skills through a number of short assignments based on readings and presentations of guest speakers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1342 - ENVIRONMENTAL ISSUES: PARKS AND FORESTS (W)

Minimum Credits: 3
Maximum Credits: 3
This course is the same as GEOL 1341, but it fulfills the University Writing Requirement. This course is one in a series that focuses on environmental issues in southwestern Pennsylvania. Forests are made up of trees. "Timber " is what they yell when the trees are cut and fall. With

maturing forests scraping the sky in Pennsylvania and other parts of the northeastern united states, and controversial restrictions on national forest timbering in the pacific northwest, there is tremendous pressure to cut the local hardwood forests. But unlike the turn of the century when all of Penn's woods was clear-cut, there is a growing ethic that believes trees are more valuable growing than cut - for recreation and environmental reasons. This course on forest and parks issues is the fourth in a series that focuses on environmental and public policy issues in south western Pennsylvania. Through newspaper articles, field trips and guest speakers, the course will explore the issues and conflicts that abound in our wildlands and urban woods. Emphasis is on a balanced presentation of the issues, discussions of various approaches to solving problems and development of writing skills through a number of short assignments based on readings and presentations of guest speakers."
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Environ-Geology (BS, BPH) or Environ-Studies (BA, BPH) or Geology (BS, BPH) or Environ-Science (BS); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

GEOL 1410 - EXPLORATION GEOPHYSICS

Minimum Credits: 3
Maximum Credits: 3
An introduction to the theory, methods, and instrumentation used in exploration geophysics. Topics include gravity, magnetics, electromagnetics, and seismic.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GEOL 1413 - GEOPHYSICAL WELL LOGGING

Minimum Credits: 3
Maximum Credits: 3
An introduction to the interpretation of well logs derived from various geophysical measurements of down-hole rock properties. Students will learn to infer lithology, fluid characteristics, production zones, and other features useful to both geologists and petroleum engineers. A class in sedimentology and stratigraphy is recommended but not required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

GEOL 1445 - GIS, GPS, AND COMPUTER METHODS

Minimum Credits: 3
Maximum Credits: 3
The goals of this course are to gain expertise in spatial analysis and geographical information systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Urban Studies

GEOL 1446 - ADVANCED GEOGRAPHICAL INFORMATION SYSTEM

Minimum Credits: 3
Maximum Credits: 3
Using advanced geographical information systems technologies and geospatial analysis techniques students will extend their knowledge of geographical information systems to include raster, geostatistical, network, model, and 3d/4d based analysis completing complex analysis of real world data sets.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 1445

GEOL 1460 - INTRODUCTION TO REMOTE SENSING

Minimum Credits: 3
Maximum Credits: 3

This course provides a foundation in the theory, techniques and applications of remote sensing and geospatial data visualization spanning the electromagnetic spectrum. Topics include light/matter interaction, optics and sensor design, image analysis, as well as current applications of remote sensing to science and engineering problems facing local and global populations. The course and integrated image-processing laboratory are designed to provide the student with a strong foundation of remote sensing science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GEOL 1510 - AQUATIC AND SEDIMENTARY GEOCHEMI

Minimum Credits: 3
Maximum Credits: 3
This course will examine the chemistry and geochemistry of modern and ancient aquatic and sedimentary systems, including oceans and fresh waters. Students will gain an understanding of the biogeochemical processes occurring in aquatic systems, and the geochemical signatures they leave in the sedimentary record.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (CHEM 0110 and GEOL 0055) or GEOL 0800 or 0860

GEOL 1515 - ENVIRONMENTAL GEOCHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This course explores the complex interactions of earth's rock, water, air, and life systems that determine the chemical characteristics of our environment. We will examine the distribution, cycling, and transport of chemical compounds in the atmosphere, hydrosphere, and terrestrial environment on local and global scales. Topics will include water chemistry, organic and inorganic pollution and related toxicology, hazardous wastes, acid rain, acid mine drainage, photochemical smog, ozone depletion, and global climate change. A class project involves chemical analysis of student-provided water samples.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHEM 0110 AND GEOL 0055; PLAN: Geology or Environmental Studies or Environmental Geology or Environmental Science (BS)

GEOL 1516 - ENVIRONMENTAL GEOCHEMISTRY WITH LAB

Minimum Credits: 4
Maximum Credits: 4
This course explores the complex interactions of Earth's rock, water, air, and life systems that determine the chemical characteristics of our environment. We will examine the distribution, cycling, and transport of chemical compounds in the atmosphere, hydrosphere, and terrestrial environment on local and global scales. Topics will include water chemistry, organic and inorganic pollution and related toxicology, hazardous wastes, acid rain, acid mine drainage, photochemical smog, ozone depletion, and global climate change. We will learn related laboratory and field techniques for geochemical analysis of water and soil in the laboratory section. Lecture (3 hours) and Lab (3 hours).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHEM 0110 AND GEOL 0055; PLAN: Geology or Environmental Studies or Environmental Geology or Environmental Science (BS) OR ECO-EV-BS OR ENVSCI OR ENVSTD

GEOL 1641 - ECOSYSTEM ECOLOGY

Minimum Credits: 4
Maximum Credits: 4
This course will provide students with an introduction to the principles of ecosystem ecology and associated applications to environmental change. Broad course themes include descriptions of the physical environment, community ecology, ecosystem ecology, ecological biogeography, and human ecology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

GEOL 1701 - GEOLOGY OF THE PLANETS

Minimum Credits: 3
Maximum Credits: 3
An introduction to the geological processes and resulting landforms occurring on the surfaces of the planets of our solar system. We will make extensive use of recent spacecraft imagery and data.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GEOL 0055

GEOL 1853 - WATERSHED HYDROLOGY AND BIOGEOCHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
Understanding the science of watersheds is critical to improving water quality. This course will examine surface water hydrology, biogeochemistry, and management of watersheds. In addition, we will focus on how varying land uses influence the dynamics of hydrology and biogeochemistry across these systems. Student will develop an understanding of the biogeochemistry of various major elements in watersheds, including nitrogen, carbon, sulfur, and mercury, and how these elemental fluxes are exchanged through atmospheric-terrestrial-aquatic interactions. Students will be expected to demonstrate critical thinking, communication, and analytical skills through student-led lectures, journal discussions, and projects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHEM 0110 and GEOL 1641

GEOL 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 4
This course places the student in an "on-the-job" setting in which he/she receives practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

GEOL 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 4
This course permits undergraduates to explore specific topics in the geological sciences. The course is designed in a more flexible format than a directed study, stressing a higher degree of independent library research.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

GEOL 1903 - UNDERGRADUATE RESEARCH

Minimum Credits: 1
Maximum Credits: 4
This course provides the opportunity for undergraduates to obtain "hands on" experience in geology by actively inter acting with faculty members on research projects.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

GEOL 1904 - DIRECTED READING

Minimum Credits: 4
Maximum Credits: 4
This course explores in-depth topics in geology and environmental studies. Topics and structure vary from term to term.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Course Requirements: PLAN: Environmental Geology (BS, BPH) or Environmental Studies (BA, BPH) or Geology (BS, BPH) or Environmental Science (BS)

GEOL 1907 - EXPERIENCE IN UNDERGRADUATE TEACHING

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

GEOL 1908 - UNDERGRADUATE FIELD STUDY EXPERIENCE (NON-TRADITIONAL)

Minimum Credits: 1
Maximum Credits: 4
This course provides the opportunity for Students to obtain field experience in environmental studies. The course is designed to be primarily self-guided but within a supervised training environment. Students must receive permission (and number of credits) through advisor. Offered every term. Off-site field experience and regular meetings with advisor are required.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

GEOL 1910 - UNDERGRADUATE THESIS

Minimum Credits: 1
Maximum Credits: 3
This course is the culmination of an undergraduate research project. Students will write a formal thesis under the supervision of a faculty mentor and give an oral presentation on their research.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

GEOL 1930 - YELLOWSTONE FIELD CLASS

Minimum Credits: 4
Maximum Credits: 4
This class uses a month of day hikes to examine the relationships between geology, biology, and how people make a living in the greater Yellowstone area. The first third of the class focuses on how the deep geologic past has generated the resources that plants, animals, and humans need to make a living. The ecology section focuses on the diverse ecosystems that exist in the dry basins, the relatively wet mountains and plateaus, and the near-arctic highest elevation areas. Finally, the public policy hikes highlight how people should best use the natural resources of the area. Students will see abundant wildlife, spectacular geology, and come to appreciate the many ways in which the West is culturally quite distinct from the East.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

GEOL 1950 - WYOMING FIELD STUDIES IN ECOLOGY AND PALEONTOLOGY

Minimum Credits: 3
Maximum Credits: 3
This 6-week course is a unique introduction to the practices of paleontology, ecology, and archaeology, with a strong emphasis on field techniques. This program focuses on the rich resources of Pitt's Spring Creek Preserve outside Laramie, WY, which includes pristine beds of dinosaur fossils, Native American artifacts, and an intact, mixed-grass prairie. We explore ecological systems ranging from prairie basins to alpine forests to mountain snowfields; we study mammals, birds, insects, and stream ecosystems; we excavate dinosaurs and find and document Native American artifacts; we reconstruct ancient environments revealed by rock outcrops and the fossils they contain; we discuss water rights, cattle grazing, wind farms, and economic development; and we experience a spectacular array of natural wonders while on a hiking and camping trip around the state that includes Yellowstone and the Tetons. This class seeks to develop an understanding of the complex geological, biological, and historical processes that shape the landscape, habitats, and natural and human communities we see today. These lessons apply both to Wyoming and the world at large.
Academic Career: Undergraduate
Course Component: Practicum

Grade Component: Letter Grade
Course Requirements: CREQ: GEOL 1951

GEOL 1951 - WYOMING FIELD STUDIES IN GEOLOGY AND PALEONTOLOGY

Minimum Credits: 3
Maximum Credits: 3
This class is one-half of a 6-week field course that, in conjunction with GEOL 1950, provides a spectacular, in-depth introduction to the practices of ecology, paleontology, and (to a lesser extent) archaeology. There is a strong emphasis on field techniques and applying what you have learned to understand how nature works. This program focuses on the rich resources of Pitt's Spring Creek Preserve outside Laramie, WY, which includes pristine beds of dinosaur fossils, Native American artifacts, and an intact, mixed-grass prairie. We explore ecological systems ranging from prairie grasslands to alpine pine forests to rushing streams to mountain snowfields; we study the abundant and diverse mammals, birds, insects, and aquatic organisms of the region; we excavate dinosaurs and find and document Native American artifacts; we reconstruct ancient environments revealed by rock outcrops and the fossils they contain; we discuss water rights, cattle grazing, wind farms, and economic development; and we experience a amazing array of natural wonders while on a hiking and camping trip around Wyoming that includes Yellowstone and the Tetons. You will develop a deep understanding of the complex geological, biological, and historical processes that shape the landscape, habitats, and natural and human communities that we see today, and you will be able to apply the principles and techniques of this class to gradually reveal the deep history of any place you visit. Students must enroll in GEOL 1950 and GEOL 1951 concurrently.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: GEOL 1950

GEOL 1960 - FIELD CAMP

Minimum Credits: 4
Maximum Credits: 8
A geology summer field camp is four to eight weeks long and includes a substantial component of geologic mapping and report writing. Field camp is the traditional capstone experience for geology and environmental geology majors. You should enroll at any accredited field camp offering at least four semester units of credit and transfer the credits to the University of Pittsburgh.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Attributes: Capstone Course

GEOL 2054 - SOILS: GEOBIOCHEMICAL LANDSCAPES

Minimum Credits: 4
Maximum Credits: 4
An overview of soils with a strong emphasis on landscape scale process. The course consists of lecture and laboratory/field work. The lecture will include description of physical and chemical soil properties and processes, discussion of major soil classifications and description of ramifications at the landscape scale.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LGSNC

GEOL 2446 - ADVANCED GEOGRAPHICAL INFORMATION SYSTEM

Minimum Credits: 3
Maximum Credits: 3
Using advanced geographical information systems technologies and geospatial analysis techniques students will extend their knowledge of geographical information systems to include raster, geostatistical, network, model, and 3d/4d based analysis completing complex analysis of real world data sets.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC
Course Requirements: PREQ: GEOL 2449

GEOL 2449 - GIS, GPS, AND COMPUTER METHODS

Minimum Credits: 3
Maximum Credits: 3

The goals of this course are to gain expertise in spatial analysis and geographical information systems
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC

GEOL 2460 - APPLIED REMOTE SENSNG AND GPS TECHNIQUES

Minimum Credits: 3
Maximum Credits: 3
Designed as a follow on to the introduction to remote sensing course this advanced class emphasizes field-oriented problems, data collection, and validation. The ultimate goal is to explore the connection between re motely-gathered imagery and the real-world factors which influence those data. Students taking the course should have had at least 1 semester of high school or college physics.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC

GEOL 2525 - STABLE ISOTOPE GEOCHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This course will provide students with a thorough introduction to the stable isotope systematics of light elements (hydrogen, carbon, nitrogen, oxygen, and sulfur). The course examines the fundamental concepts of isotope equilibrium and kinetics, physiochemical and biogenic mechanisms of isotope exchange, and the principles of mass spectrome try and stable isotope extraction techniques.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LGSNC
Course Requirements: PREQ: GEOL 2520

GEOL 2853 - WATERSHED HYDROLOGY AND BIOGEOCHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
Understanding the science of watersheds is critical to improving water quality. This course will examine surface water hydrology, biogeochemistry, and management of watersheds. In addition, we will focus on how varying land uses influence the dynamics of hydrology and biogeochemistry across these systems. Student will develop an understanding of the biogeochemistry of various major elements in watersheds, including nitrogen, carbon, sulfur, and mercury, and how these elemental fluxes are exchanged through atmospheric-terrestrial-aquatic interactions. Students will be expected to demonstrate critical thinking, communication, and analytical skills through student-led lectures, journal discussions, and projects.
Academic Career: GRAD
Course Component: Lecture
Grade Component: GradLG/SU3

German

GER 0001 - ELEMENTARY GERMAN 1

Minimum Credits: 5
Maximum Credits: 5
This is an elementary language acquisition course and aims to teach students how to carry out various functions likely to be necessary in dealing with others in the target language. The course aims to develop all four language skills--speaking, listening, reading, and writing, and deals with culture as an integral part of each skill. The language acquisition exercises are supplemented by an integrated and systematic presentation of grammar.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 0002 - ELEMENTARY GERMAN 2

Minimum Credits: 5
Maximum Credits: 5
This course completes the introduction of the basic structures of German begun in German 0001. It emphasizes all four language skills--speaking, listening, reading, and writing and deals with culture as an integral part of each skill. The language acquisition exercises are supplemented by an integrated and systematic presentation of grammar.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 0001 or GER 0101, or Equivalent; MIN GRADE: B-, or Online Test Score equal/greater 281 or Paper Test Score equal/greater 6
Course Attributes: DSAS Second Language General Ed. Requirement

GER 0003 - INTERMEDIATE GERMAN 1

Minimum Credits: 3
Maximum Credits: 3
Conducted entirely in German, this course provides structured practice in understanding, speaking, reading (unedited texts), and writing. The language-acquisition exercises are supplemented by an integrated and systematic review of grammar, emphasizing those structures that are needed for practical communication in authentic German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 0002 or GER 0102 or Online Test Score equal/greater 381 or Paper Test Score equal/greater 22

GER 0004 - INTERMEDIATE GERMAN 2

Minimum Credits: 3
Maximum Credits: 3
Conducted entirely in German, this course enables students to describe in past, present, and future time, and to initiate and sustain a conversation. They discuss contemporary texts and topics, participate in small group activities, and strengthen their writing skills through journal writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: College in High School - UGRD - students only.
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GER 0012 - CONVERSATION 2

Minimum Credits: 3
Maximum Credits: 3
Like its companion course, German 0011, this course emphasizes oral proficiency. The course enables students to converse in formal and informal situations, resolve problems, deal with unfamiliar topics, provide explanations, describe in detail, offer supported opinions, and hypothesize. Areas of context are practical, social, professional, and abstract topics, particular interests, and special fields of competence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 0021 - GERMAN READING 1

Minimum Credits: 4
Maximum Credits: 4
The objective of this course is to develop a basic reading knowledge of German. It is a beginning course which introduces all the structures of German grammar. German 0021 is designed for students who wish to acquire basic reading skills in the shortest possible time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

GER 0022 - GERMAN READING 2

Minimum Credits: 4
Maximum Credits: 4
This course is designed to help students obtain an intermediate reading knowledge of German. Students read unedited texts from general fields and from their own areas of specialization. The course includes a systematic review of grammar.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, West European Studies

GER 0058 - MUNICH: HISTORY, CULTURE, SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

GER 0070 - EUROPEAN IDENTITY BETWEEN HISTORY AND EUROPEAN UNION CULTURAL POLICY

Minimum Credits: 3
Maximum Credits: 3
This course is explores the state of the European union today with respect to the issue of collective identity formation by integrating the historical development of the EU with studying its evolving institutional structure. The course examines how culture which was originally only an afterthought of European integration has gained in importance since the overarching permissive consensus with which European populations passively supported the integration process began to crumble with the Maastricht treaty of 1992. Through a variety of sources from across the social sciences, political theory and social philosophy, the course elucidates how EU cultural policy aims to engender a transnational European identity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement

GER 0101 - BEGINNING GERMAN 1

Minimum Credits: 3
Maximum Credits: 3
This is the first part of our elementary language course sequence. In these proficiency-oriented courses students begin to learn how to communicate in German. The course emphasizes all four skills - speaking, listening, reading, and writing - and introduces students to the culture of the German-speaking countries. Students will be working towards the A1-level of the Common European Framework of Reference. Students should plan to take German 0102 during the following semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 0102 - BEGINNING GERMAN 2

Minimum Credits: 3
Maximum Credits: 3
This is the second part of our elementary language course sequence. In these proficiency-oriented courses students begin to learn how to communicate in German. The course emphasizes all four skills - speaking, listening, reading, and writing - and introduces students to the culture of the German-speaking countries. Students will be working towards the A2-level of the Common European Framework of Reference. Students should plan to take either German 0103 or German 0203 during the following semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, UPB Global General Ed. Requirement, UPB Language General Ed. Requirement

GER 0103 - BEGINNING GERMAN 3

Minimum Credits: 3
Maximum Credits: 3
This is the third part of our elementary language course sequence. In these proficiency-oriented courses students begin to learn how to communicate in German. The course emphasizes all four skills - speaking, listening, reading, and writing - and introduces students to the culture of the German-speaking countries. Students will continue to work towards the A2-level of the Common European Framework of Reference. Students should plan to take German 201 during the following semester

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement

GER 0201 - INTERMEDIATE GERMAN 1

Minimum Credits: 3
Maximum Credits: 3
This is the first part of our intermediate language course sequence. These courses will provide students with opportunities to further develop their listening, speaking, reading and writing skills, to strengthen their grammatical knowledge and expand their vocabulary. Students will begin to work towards the B1-level of the Common European Framework of Reference. Students should plan to take German 202 during the following semester
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Second Language General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GER 0202 - INTERMEDIATE GERMAN 2

Minimum Credits: 3
Maximum Credits: 3
This is the second part of our intermediate language course sequence. These courses will provide students with opportunities to further develop their listening, speaking, reading and writing skills, to strengthen their grammatical knowledge and expand their vocabulary. Students will continue to work towards the B1-level of the Common European Framework of Reference.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GER 0203 - INTENSIVE INTERMEDIATE GERMAN 1

Minimum Credits: 5
Maximum Credits: 5
This is the first part of our intensive intermediate language course sequence. The class meets every day and thus allows students to develop their listening, speaking, reading and writing skills, to strengthen their grammatical knowledge and expand their vocabulary at a faster pace than in the regular courses. Students will begin to work towards the B1-level of the Common European Framework of Reference.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GER 0204 - INTENSIVE INTERMEDIATE GERMAN 2

Minimum Credits: 5
Maximum Credits: 5
This is the second part of our intensive intermediate language course sequence. The class meets every day and thus allows students to develop their listening, speaking, reading and writing skills, to strengthen their grammatical knowledge and expand their vocabulary at a faster pace than in the regular courses. Students will continue to work towards the B1-level of the Common European Framework of Reference.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

GER 0205 - CONVERSATION 1

Minimum Credits: 3
Maximum Credits: 3
This course is intended to assist novice level students to strengthen their communicative proficiency. Students learn to handle their needs adequately for travel in Germany or a German-speaking country. In order to encourage oral communication, there is extensive use of audio-visual teaching aids.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 0206 - CONVERSATION 2

Minimum Credits: 3
Maximum Credits: 3
Like its companion course, German 0011, this course emphasizes oral proficiency. The course enables students to converse in formal and informal situations, resolve problems, deal with unfamiliar topics, provide explanations, describe in detail, offer supported opinions, and hypothesize. Areas of context are practical, social, professional, and abstract topics, particular interests, and special fields of competence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 0226 - INTRODUCTION TO YIDDISH LANGUAGE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

GER 1000 - READING LITERARY TEXTS

Minimum Credits: 3
Maximum Credits: 3
This course aims to strengthen your reading skills in German by introducing you to a variety of genres and writing styles, from the eighteenth to the twenty-first century. You will have the opportunity to work on your extensive and intensive reading skills, as you acquire new strategies for identifying generic conventions, differentiating between literal and figurative language, and parsing grammatically complex sentences
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 0202 or 0204 or 0004 (MIN GRADE: B-) or Online Test Score equal/greater 550
Course Attributes: West European Studies

GER 1001 - GERMAN WRITING

Minimum Credits: 3
Maximum Credits: 3
This course is designed to strengthen the student's composition skills through constant practice in writing, revising, and editing. The goal is to be able to express thoughts effectively in correct and well-structured German prose, including business correspondence. Strong emphasis is put on problems of stylistics, including punctuation, sentence structure, word usage, and figures of speech.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 0004 (MIN GRADE: B-) or Online Test Score equal/greater 550 or Paper Test Score equal/greater 55; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: West European Studies, Writing Requirement Course

GER 1003 - PROFESSIONAL GERMAN

Minimum Credits: 3
Maximum Credits: 3
This is an advanced language acquisition course and aims to familiarize students with specialized vocabulary and practices of German-speaking countries in professional environments of such areas as communications, advertisement, international trade, engineering, and law. The course will focus on oral and aural proficiency, appropriate written discourse and reading. The course integrates economic geography the legal and political system of German-speaking countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: GER 0202 or 0204 or 0004 (MIN GRADE: B-) or Online Test Score equal/greater 550
Course Attributes: West European Studies, Writing Requirement Course

GER 1004 - THE GERMAN BUSINESS (ECO)SYSTEM

Minimum Credits: 3
Maximum Credits: 3
Subject-oriented, authentic texts and videos serve as the vehicle for an efficient and accelerated introduction to business German. The course emphasizes both receptive (reading and listening) and productive (speaking and writing) skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 0004, 0202 or GER 204 (MIN GRADE: B-); Online Test Score 550 or better

GER 1005 - GERMAN MEDIA

Minimum Credits: 3
Maximum Credits: 3
In this course, students will strengthen their knowledge of existing grammatical structures and will examine the specific aspects of daily life in Germany via contemporary electronic and print genres. The latter will include online articles and hard copy news sources and a range of daily and weekly news sources. Class discussions, debates, oral reports, and short written assignments will also be based on topics derived from current podcasts, social networking sites, television advertisements and online series, and from new documentary and feature films.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: GER 0004 (MIN GRADE: B-) or Online Test Score Equal/Greater 550 or Paper Test Score Equal/Greater 55
Course Attributes: DSAS Creative Work General Ed. Requirement

GER 1051 - INTRODUCTION TO LITERARY ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Competing methods of literary investigation are analyzed in terms of (1) their underlying assumptions about the nature of art and the relationship between literature and reality and (2) their usefulness as tools for practical criticism. Each approach is examined as a coherent model and then evaluated with reference to actual critical practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 0004 (MIN GRADE: B-) or Online Test Score equal/greater 550 or Paper Test Score equal/greater 55; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: SCI Polymathic Contexts: Humanistic GE. Req., West European Studies, Writing Requirement Course

GER 1101 - GERMAN MEDIA 2

Minimum Credits: 3
Maximum Credits: 3
Intended to be a challenging upper-level language course, advanced German 1 strengthens students' linguistic skills primarily in speaking and listening, but also in reading and writing. We examine specific aspects of daily life (for example, work, housing, leisure, education, youth, and family) via contemporary print, audio, and video media.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any 1000-level German class
Course Attributes: West European Studies

GER 1102 - THE GERMAN-SPEAKING WORLD TODAY

Minimum Credits: 3
Maximum Credits: 3
Students who wish to use German as an effective professional tool or enroll at a German university benefit most from this course. They investigate and practice the structure and style of written German, participate in discussions on a variety of public and academic issues, listen to German lectures and broadcasts, and present German papers on topics of their choice.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any 1000 Level German Course
Course Attributes: West European Studies

GER 1103 - ADVANCED GERMAN 2: CREDIT LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This course supplements advanced German 2 by providing authentic language exercises and practical information about everyday life in Germany. It is designed specifically for students preparing to matriculate into a German University, but will also prove useful to those with other travel goals.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

GER 1104 - GERMAN FOR SOCIAL SCIENTISTS 1

Minimum Credits: 3
Maximum Credits: 3
This course has a three-part teaching objective: a) it analyzes how the historical experience of the weimar republic and World War II shaped the politico-economic system and national identity in West Germany; b) it reviews major grammatical structures (of German passive voice, subjunctive I and II) necessary to comprehend scholarly materials in the social sciences; and c) it allows students to practice their German language skills in all four areas: reading writing, listening and speaking.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any 1000-Level German Course
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement

GER 1105 - LITERARY ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
General content, purposes, and methods of this course: students will learn the characteristic features of poetry, prose, and drama and will develop a technical vocabulary to interpret literary works in German. We will also learn about some of the different methodologies and theoretical approaches that literary critics employ to analyze texts. We will build upon and expand the reading techniques and strategies learned in 1000-level courses to prepare students for the more advanced literature and culture seminars at the 1200-level. Readings, class discussions, tests, oral reports and written assignments, including a journal, will be in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: Any 1000 level German Course
Course Attributes: DSAS Literature General Ed. Requirement

GER 1106 - GERMAN CULTURAL HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to major developments and figures in European cultural history from the German tribes to the enlightenment (CA. 750 AD to 1785). It weaves together texts and artifacts from the time period covered and current print as well as audio-visual materials in order to analyze how past cultural history informs German and European collective identity today. This course will be conducted entirely in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: Any course from GER 1000-1099
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

GER 1108 - GREEN GERMANY

Minimum Credits: 3
Maximum Credits: 3
A course for advanced intermediate students of German (B1+ level according to CEFR, the Common European Framework of Reference) who want to gain a more thorough insight into German culture, and at the same time work towards a higher proficiency level in their language skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: Any 1000-level GER course (MIN GRADE: B-).
Course Attributes: DSAS Geographic Region General Ed. Requirement

GER 1204 - GERMAN FOR SOCIAL SCIENTISTS 2

Minimum Credits: 3
Maximum Credits: 3
This course has a three-part teaching objective: 1) it analyzes historical development and institutional structures of the European union and asks the question to which extent this supranational union was able to engender a collective identity; 2) it allows students to practice their German language skills in all four areas: reading, writing, listening and speaking; 3) it teaches students how to write an analytic seminar paper in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: Any 1100 level German course
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Second Language General Ed. Requirement, DSAS Social Science General Ed. Requirement

GER 1220 - LITERATURE AND CULTURE 1750-1830

Minimum Credits: 3
Maximum Credits: 3
This course reviews one of the most famous and exciting periods of German literature: a period of great social and intellectual upheavals, of sentimental novels and revolutionary plays, of classical poems and folk tales, when an admired poet became an influential politician, and rebellious women wrote even though they were not supposed to. Students will read some of the classics of German literature, and learn about the historical context of these works. All primary readings and class discussions are in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 1000 or 1001
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, West European Studies

GER 1228 - LITERATURE AND CULTURE 1830-1890

Minimum Credits: 3
Maximum Credits: 3
Major literary and cultural documents from between about 1830 and 1890 are analyzed both formally and thematically in order to understand them in their social and historical contexts. Primary readings are in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 1000 OR 1001
Course Attributes: West European Studies

GER 1234 - LITERATURE AND CULTURE 1890-1918

Minimum Credits: 3
Maximum Credits: 3
Major literary and cultural documents from between about 1890 and 1918 are analyzed both formally and thematically in order to understand them in their social and historical contexts. Primary readings are in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 1252 - CURRENT LITERATURE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
In this course, students concentrate on the most recent trends in German literature and culture. Readings from a variety of genres and authors are discussed in the larger context of cultural trends and traditions which have a bearing on current literary and other issues. All readings are in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GER 1001 or 1001
Course Attributes: West European Studies

GER 1324 - SPECIAL TOPICS IN GERMAN PROSE

Minimum Credits: 3
Maximum Credits: 3
An in-depth investigation of a literary or cultural problem related to prose fiction. As the topic changes, this course may be repeated for credit.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: One 1100-level GER course

GER 1350 - GERMAN DRAMA

Minimum Credits: 3
Maximum Credits: 3
An overview, crossing several literary-historical periods, of the development of German drama.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any 1000-level GER course (MIN GRADE: B-).
Course Attributes: DSAS Creative Work General Ed. Requirement

GER 1380 - TOPICS IN GERMAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
A survey of the new German cinema. This course examines the cultural and social conditions that made possible and shaped the diversity of West German films since the sixties and continue to do so in the eighties. With the emphasis on the work of internationally renowned directors such as Fassbinder, Herzog, and Wenders, the course also pays tribute to the lesser known but equally important work of women directors and experimental filmmakers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

GER 1390 - MINORITIES IN POST-WAR GERMANY

Minimum Credits: 3
Maximum Credits: 3
This course analyzes the complex nature of the relationship between the native and foreign population in Germany today. Topics include the history of immigration to Germany, the legal inscription of otherness, and the constitution of identity by the immigrant minority. Using literary and non literary documents as well as different media, students will be introduced to the manifold forces which shape collective images and cultural identities in Germany.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Two 1000-level German Courses
Course Attributes: Russian & East European Studies, West European Studies

GER 1399 - SENIOR CAPSTONE SEMINAR

Minimum Credits: 3
Maximum Credits: 3

This course is for senior German majors. It will require students to write a senior thesis on a German topic, drawn from their own interests but also related to the focus of the seminar. The specific focus of the seminar will change each year, depending on the instructor, but will be constructed to highlight the intersections between multiple epochs, genres, themes, and/or disciplines. Every version of the seminar will require a senior thesis or project that allows the student to pursue his/her own interests within the topic of the seminar. Seminar readings will be in German.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: Any 1000 Level German Course and Any 1100 Level German Course; LVL: Senior
Course Attributes: Capstone Course

GER 1409 - EUROPEAN INTELLECTUAL HIST 2 1870-1940

Minimum Credits: 3
Maximum Credits: 3
A course of readings and discussions focused on major texts in the European intellectual tradition from the age of positivism to the second World War. There will be occasional lectures, especially on the social and institutional contexts, but the predominant emphasis will be on class discussions of primary readings. Students who wish to take the course for the German major will be asked to write their papers, and do a substantial portion of the reading, in German.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Any Two 1000-level German Courses

GER 1410 - KAFKA AND THE MODERN WORLD

Minimum Credits: 1
Maximum Credits: 1
Kafka's major works are examined both formally and thematically with reference to the modernist tradition. Recurring issues include authority, alienation, mass society, guilt and punishment, truth, and writing. Regular assignments from the secondary literature introduce students to central questions of literary criticism and theory. Essays by Kierkegaard, Marx, Nietzsche, and Freud further elaborate the cultural context in which Kafka's texts were produced. All readings are in German.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit
Course Requirements: CREQ: GER 1510 or ENGLIT 1510
Course Attributes: DSAS Literature General Ed. Requirement

GER 1490 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 5
An in-depth investigation of a literary or cultural problem that lies outside of traditional literary-historical or genre classifications. As the topics change, this course may be repeated for credit.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

GER 1500 - GERMANIC MYTHS, LEGENDS AND SAGAS

Minimum Credits: 3
Maximum Credits: 3
This course presents a survey of Northern European cultural values from about 500 B.C. To about 1500 A.D. Sources include archaeological finds, sagas, ballads, legends, customs, superstitions, place names, and language expressions. Topics include social organization, distribution of labor and wealth, the position of women and children in family and society, and the uses of supernatural beliefs to achieve worldly goals. Where appropriate, parallels will be drawn between modern Northern European values and their formative myths from the distant past.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, West European Studies

GER 1502 - INDO-EUROPEAN FOLKTALES

Minimum Credits: 3
Maximum Credits: 3
German 1502 is a study of the esthetic, psychological, and social values reflected in a variety of European folklore genres, including magic tales, legends, proverbs, superstitions, and jests. The Grimms' pioneering collections constitute the course's nucleus, but it draws numerous supporting examples from other European countries as well.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

GER 1503 - INDO-EUROPEAN FOLKTALES WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
German 1503 is the writing practicum for German 1502. This practicum concentrates on the problems of grammar, style, organization, and documentation associated with the writing assignments for the course.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

GER 1504 - EUROPEAN IDENTITY BETWEEN HISTORY AND EUROPEAN UNION CULTURAL POLICY

Minimum Credits: 3
Maximum Credits: 3
This course is explores the state of the European union today with respect to the issue of collective identity formation by integrating the historical development of the EU with studying its evolving institutional structure. The course examines how culture which was originally only an afterthought of European integration has gained in importance since the overarching permissive consensus with which European populations passively supported the integration process began to crumble with the Maastricht treaty of 1992. Through a variety of sources from across the social sciences, political theory and social philosophy, the course elucidates how EU cultural policy aims to engender a transnational European identity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement

GER 1510 - KAFKA AND THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
Human bugs, tortured bodies, persecuted sons, this course examines the literature and legacy of one of the world's greatest authors. Explore questions of power, truth, and self. Learn about German Jewish culture in Prague at the turn of the century. All readings and discussions in English.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Global Studies, Russian & East European Studies, West European Studies

GER 1512 - GERMAN LITERATURE AND EUROPEAN PHILOSOPHY: GOETHE'S FAUST

Minimum Credits: 3
Maximum Credits: 3
This course analyzes Goethe's Faust in its entirety with reference to its epistemological, ethical, and aesthetic investments. Students explore how this masterpiece of German literature staged and re-articulated important conceptual issues within the European philosophical tradition with supplementary readings from Plato, Aristotle, Spinoza, Leibniz, and Kant, as well as Whitehead and Deleuze. The goal of the readings is to construct a conceptual apparatus that can serve as framework of interpretive analysis as well as a reconfiguration of the perennial questions of philosophy and literature regarding their own essence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement

GER 1518 - BERTOLT BRECHT

Minimum Credits: 3
Maximum Credits: 3
The course discusses Bertolt Brecht in his various roles as playwright, poet, dramaturg, and critic. His theory of the epic theater is used as a backdrop to interpret his plays. His polemic against traditional theater is viewed not merely within the narrow constraints of Marxism, but in the wider context of Avant Garde theater. His influence on theater of the Twentieth Century outside of the German-speaking world is also analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 1522 - GERMANY TODAY

Minimum Credits: 3
Maximum Credits: 3
In this course the current cultural, political, and social situation in the German speaking countries is assessed. What are the concerns of Germans, Austrians, the Swiss? By concentrating on current conditions and changes of public consciousness, issues important to German speakers are debated. Materials include articles from journals and newspapers, documentaries, slides, and contemporary works of literature. All materials are in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, West European Studies

GER 1524 - GERMAN CONTRIBUTIONS WORLD LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course investigates the esthetic qualities and the cultural backgrounds of those German writers of the past 200 years who have genuinely become members of the world literature community. Authors discussed include Goethe, Nietzsche, Kafka, Brecht, and Mann. All materials are in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 1526 - DRAMA OF IDEAS

Minimum Credits: 3
Maximum Credits: 3
Although it has been argued that "a poem should not mean, but be", many writers have unashamedly given their art a didactic function. This course identifies the types of causes that literary artists traditionally have championed, and then focuses on the literary techniques that they used to achieve their end. The course is thus a study of "the art of moral persuasion". The principal works investigated are "dramas of ideas" by such playwrights as Ibsen, Shaw, and Brecht, although supplemental prose writings are also included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 1528 - VIENNA

Minimum Credits: 3
Maximum Credits: 3
Viennese culture in the age of modernism anticipates crucial issues, concerns, and debates of our time. The present lecture series introduces students to the multifaceted Viennese developments in art, literature, music, philosophy, and science from the late nineteenth century to World War II. Among the major figures discussed in this course are: Mach, Wittgenstein, Freud, Schnitzler, Kraus, Klimt, Schiele, Loos, Schonberg, Alban Berg. Readings are in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

GER 1529 - BERLIN: A DIVIDED CITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

GER 1530 - WEIMAR CULTURE

Minimum Credits: 3
Maximum Credits: 3
The twenties were one of the most exciting periods in Germany's cultural history. At the same time, they were a time of great political and economic instability. This course examines Weimar culture across a range of cultural practices (literature, theater, painting, architecture, and film). Selected works from the period will be analyzed in the context of the artistic and political avant-garde, and the productive exchanges between high and popular culture. Special emphasis will be placed on the impact of technology on everyday life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 1531 - ELEMENTARY GERMAN 1 FOR MASTER OF BUSINESS ADMINSTRATION STUDENTS

Minimum Credits: 2
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

GER 1535 - OUTSIDERS IN GERMAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course surveys major works of German literature of the 18th, 19th and 20th centuries and develops literary analytical skills. Students will learn about various aspects of German culture by focusing on "outsiders"-individuals who live on the margins of a social order and, by their very marginality, help define accepted social norms. Readings include texts by Goethe, Kleist, Hoffmann, Buchner, Mann, Kafka, Borchert, Bachmann, Plenzdorf, and Wolf.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, West European Studies, Writing Requirement Course

GER 1540 - NIETZSCHE AND THE NIETZSCHEANS

Minimum Credits: 3
Maximum Credits: 3
Friedrich Nietzsche (1844-1900) continues to be one of the most influential modern philosophers, yet controversy surrounds almost every aspect of his life and work. This course will help students go beyond the controversy in order to consider Nietzsche's texts discerningly and how he approached the problems of truth, power, and morality. Close examination of his most important writings will be complemented by inquiry into Nietzsche's effects on Twentieth-Century philosophy, literature, and culture. The course will also survey major influences of Nietzsche's approaches on subsequent philosophers and scholars.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: Jr or Sr
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

GER 1542 - MARX AND MARXISM

Minimum Credits: 3
Maximum Credits: 3
Having recently passed the 150th anniversary of the publication of capital volume 1, we recognize that our world has changed a great deal since its publication. Yet, in reviewing many of these changes, it is not overstated to say that the works of Karl Marx have provided the transformational impulse. Who was this person, Karl Marx? Why is it that in this post-cold war world his writings continue both to inspire and threaten contemporary readers? How have those inspired by Marx further developed his ideas to constitute the discourse of Marxism? These are some of the questions that this course will raise and try to answer. We will begin with discussions of key works by Marx. Concentrating on the question of culture and cultural analysis, we will then move on to examine some significant contributions to Marxism. The course will end by looking at contemporary attempts at rethinking Marxism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement

GER 1544 - FREUD AND FREUDIANS

Minimum Credits: 3
Maximum Credits: 3
Freud is one of the most influential thinkers of the 20th century. His groundbreaking work on dreams, the Oedipus complex, and psychoanalytic method have profoundly changed our understanding of the psyche and social interaction. This course provides a basic survey of Freud's most important and often controversial writings/discoveries within their historical context and with regards to significant criticisms of his work. It includes a brief survey of various branches of psychoanalysis to develop after Freud, especially those of Lacan and Kristeva.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: Jr or Sr

GER 1545 - NAZI CULTURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

GER 1546 - HOLOCAUST LITERATURE AND FILM

Minimum Credits: 3
Maximum Credits: 3
This course relies on primary cultural sources of the third Reich, especially film, but also literary, visual, architectural, musical, etc. To examine the parameters of Nazi culture. It will examine such diverse aspects as the leader principle, gender roles, racial hygiene, anti-Semitism, mass culture, propaganda, and visions of history. The cultural artifacts will be analyzed both in terms of their aesthetics as well as the social and historical context of their production.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 1548 - NEW GERMAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
Devastated after World War II, starting in the 1960s a number of German directors like Herzog, Fassbinder, Wenders, Kluge, Annders-Abrahms managed to bring international attention back to German cinema. They competed against the film industry of Hollywood under difficult conditions of production, and in many instances made the difficult transition out of the art house and into the mainstream movie theater. Yet these names only represent a small portion of those directors active in the new German cinema. This class will examine the aesthetic and technical contributions of new German cinema as well as the historical and social context of its production. The technological, financial, and intellectual destruction caused by the experience of national socialism and World War II required creative responses that have led to a solid and symbolically rich body of work. In examining the themes and experimental forms of various filmmakers, students will gain insight into the issues that occupied the German public sphere from the 1960s onward.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

GER 1550 - COMPUTATIONAL METHODS IN HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

GER 1590 - SPECIAL TOPICS IN TRANSLATION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

GER 1598 - VIENNA NOW AND THEN: A FIELD TRIP

Minimum Credits: 1
Maximum Credits: 1
This course is a field trip to Vienna that gives students an insight into comparisons between the Austrian capital as gateway to the EU and "Vienna 1900," the major cultural center of the Austrian-Hungarian Monarchy. The course will focus on several key issues: the Austrian, in particular the Viennese role in the European Union and the supranational status of the Habsburg metropolis in Europe 1900; the rise of nationalism, racism, and anti-Semitism now and then; the socio-political situation of minorities; the city's attempts to cope with immigration as well as refugees in the early twentieth century and today; the multifaceted relationships between social classes, genders, and generations now and then; the clash between historicism and modernism in art, architecture, and literature. The field trip is connected to the course GER 1528 VIENNA. Students will visit the historical and civic sites discussed in this course; they will visit the university, national library, and the museums displaying the works of artists and architects such as Klimt, Schiele, and Loos. They will also have an opportunity to meet with a faculty member from the University of Vienna and/or a representative of the city council. The course will be taught in English.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit
Course Requirements: Preq: GER 1528 - VIENNA

GER 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 5
A course designed for students who wish to work independently on individually designed projects.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

GER 1902 - DIRECTED STUDY

Minimum Credits: 0
Maximum Credits: 15
A course for students who wish to work on individually designed projects under the supervision of a faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

GER 1903 - GERMAN LANGUAGE TRAILER

Minimum Credits: 1
Maximum Credits: 1

Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Satisfactory/No Credit

GER 1905 - GERMAN INTERNSHIP 1

Minimum Credits: 1
Maximum Credits: 3
This course places the student in a work setting where they can gain practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

GER 1906 - GERMAN INTERNSHIP 2

Minimum Credits: 1
Maximum Credits: 3
This course places the student in a work setting where they can gain additional practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

GER 1907 - GERMAN LANGUAGE ABROAD: PITT IN BERLIN

Minimum Credits: 1
Maximum Credits: 5
The German Department and the Office of Study Abroad will launch a new "Pitt in Berlin" program in the Spring of 2020. In this program, as well as in some others we have, students of varying language ability will enroll in a language course abroad commensurate with their language level. Their language level is typically determined on-site, however, so students need to enroll ahead of time, not knowing what language course they will place into. For this reason we are creating a generic course number and title, German 1904 "German Language Abroad," to account for these situations. This course number, in effect a "placeholder", will allow student to enroll in a language course according to the regular time schedule. Upon return to Pitt, students meet with the Director of Undergraduate Studies in German to determine where the course taken fits into the language curriculum at Pitt and credit will be awarded accordingly.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GER 1990 - SENIOR THESIS

Minimum Credits: 1
Maximum Credits: 5
A course for senior honors German majors.
Academic Career: Undergraduate
Course Component: Thesis Research
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course, West European Studies

Greek

GREEK 0011 - BEGINNING ANCIENT GREEK 1

Minimum Credits: 5
Maximum Credits: 5
This course is the first half of a two-term sequence introducing students to the morphology and syntax of classical attic Greek. Its purpose is to move students as quickly as possible to the reading of simple Greek prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies

GREEK 0021 - BEGINNING ANCIENT GREEK 2

Minimum Credits: 5
Maximum Credits: 5
This course is the second half of a two-term sequence introducing students to the morphology and syntax of classical attic Greek. Its purpose is to move students as quickly as possible to the reading of simple Greek prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEK 0011
Course Attributes: DSAS Second Language General Ed. Requirement, Medieval & Renaissance Studies

GREEK 0101 - BEGINNING ANCIENT GREEK 1

Minimum Credits: 4
Maximum Credits: 4
GREEK 0101 constitutes one-half of the first year of instruction in Ancient Greek. The course introduces students to grammar and vocabulary with a view to reading original Greek texts. It also aims to help students develop effective study skills and habits that will facilitate readings of Greek prose and poetry in the second year and beyond.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GREEK 0102 - BEGINNING ANCIENT GREEK 2

Minimum Credits: 4
Maximum Credits: 4
GREEK 0102 constitutes the second half of the first year of instruction in Ancient Greek. The course continues to introduce students to grammar and vocabulary, and will allow them to read longer excerpts of original Greek texts towards the end of the term. It also aims to help students develop effective study skills and habits that will facilitate readings of Greek prose and poetry in the second year and beyond.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement

GREEK 0210 - INTERMEDIATE GREEK: PROSE

Minimum Credits: 3
Maximum Credits: 3
In this course students consolidate their grasp of Greek grammar and develop their skills of comprehension through close reading of selected prose texts, often one or more of the shorter dialogues of Plato.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEK 0021 or 0102
Course Attributes: Medieval & Renaissance Studies

GREEK 0220 - INTERMEDIATE GREEK: VERSE

Minimum Credits: 3
Maximum Credits: 3
In this course students are introduced to the morphology and grammar of Homeric Greek and read selected portions of the Iliad or Odyssey.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEK 0210
Course Attributes: Medieval & Renaissance Studies

GREEK 1011 - BEGINNING ANCIENT GREEK 1

Minimum Credits: 5
Maximum Credits: 5
This course is the first half of a two-term sequence introducing students to the morphology and syntax of classical attic Greek. Its purpose is to move students as quickly as possible to the reading of simple Greek prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies

GREEK 1021 - BEGINNING ANCIENT GREEK 2

Minimum Credits: 5
Maximum Credits: 5
This course is the second half of a two-term sequence introducing students to the morphology and syntax of classical attic Greek. Its purpose is to move students as quickly as possible to the reading of simple Greek prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Medieval & Renaissance Studies

GREEK 1300 - GREEK AUTHORS 1

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Greek authors. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEK 0210 and 0220
Course Attributes: West European Studies

GREEK 1301 - GREEK AUTHORS 1-WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking Greek 1300 as a writing course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEK 0210 and 0220; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: West European Studies, Writing Requirement Course

GREEK 1302 - GREEK AUTHORS 2

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Greek authors. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEK 0210 and 0220
Course Attributes: West European Studies

GREEK 1303 - GREEK AUTHORS 2-WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking Greek 1302 as a writing course.
Academic Career: Undergraduate

Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEK 0210 and 0220; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: West European Studies, Writing Requirement Course

GREEK 1400 - ADVANCED READINGS IN GREEK EPIC

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Greek epic poets. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: GREEK 1300 or 1302

GREEK 1402 - ADVANCED READINGS IN GREEK TRAGEDY

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected Greek tragedies. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: GREEK 1300 or 1302
Course Attributes: West European Studies

GREEK 1416 - ADVANCED READINGS IN GREEK HISTORIANS

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Greek historians. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: GREEK 1300 or 1302
Course Attributes: West European Studies

GREEK 1420 - ADVANCED READINGS IN GREEK PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Greek philosophers. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: GREEK 1300 or 1302

GREEK 1700 - GREEK PROSE COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This course provides students with a thorough review of Greek grammar and practice in the writing of Greek prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

GREEK 1800 - HONORS COURSE/MAJORS

Minimum Credits: 3
Maximum Credits: 3
In this course undergraduate majors in classics who wish to graduate with honors (and are otherwise qualified) write an honors paper, usually in conjunction with a Greek reading course at the 1300 or 1400 level.
Academic Career: Undergraduate
Course Component: Thesis Research
Grade Component: Satisfactory/No Credit

GREEK 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
In this course a student undertakes study in Greek in consultation with a member of the faculty.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

GREEK 1902 - DIRECTED STUDY FOR UNDERGRADS

Minimum Credits: 1
Maximum Credits: 6
In this course a student undertakes directed study in Greek under the close guidance of a member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

GREEK 1903 - DIRECTED RESEARCH FOR UNDERGRADS

Minimum Credits: 1
Maximum Credits: 9
In this course a student undertakes directed research in the field of classical civilization under the close guidance of a member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

GREEK 1904 - UNDERGRAD RESEARCH ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 3
This course enables advanced majors to receive academic credit for serving as assistants to faculty members who are conducting research projects (e.g., compiling bibliography for a new class, preparing a work for publication, creating a conference presentation). This collaborative project will result in a meaningful experience that will provide the student with a foundation in the mechanics of research and publication. Given the variable aspects of this learning experience, there is not official syllabus. However, students and faculty who participate in this course are required to submit a signed contract prior to the start of the semester in which the assistantship will occur. This contract is subject to the approval of the undergraduate committee.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

GREEK 1990 - UNDERGRADUATE TEACHING ASSISTANTSHIP IN GREEK

Minimum Credits: 1
Maximum Credits: 5
This course allows students to earn credits for serving as undergraduate teaching assistants in courses listed under the 'Greek' subject code. Admission requires permission of the department chair. Students may repeat for credit.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

Hebrew

HEBREW 0101 - ELEMENTARY HEBREW 1

Minimum Credits: 5
Maximum Credits: 5
This course introduces students to the fundamentals of the Hebrew language. We study basic vocabulary, grammar and sentence structure, and learn to read and write Hebrew. Emphasis is learning to speak the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 0102 - ELEMENTARY HEBREW 2

Minimum Credits: 5
Maximum Credits: 5
Continuation of the introductory work begun in Hebrew 1. Students further develop their reading, writing and speaking skills with the greatest emphasis being placed on oral communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement

HEBREW 0103 - INTERMEDIATE HEBREW 3

Minimum Credits: 3
Maximum Credits: 3
Students continue to develop the skills acquired in Hebrew 2 with emphasis on speaking and on understanding the spoken language. Readings this term include short stories and articles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 0104 - INTERMEDIATE HEBREW 4

Minimum Credits: 3
Maximum Credits: 3
Students continue to develop their Hebrew reading and speaking skills. Sophisticated Hebrew texts are introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 0105 - ADVANCED HEBREW 5

Minimum Credits: 3
Maximum Credits: 3
This course is for advanced level students and uses Hebrew language literature, print and electronic media, film, and TV shows. Emphasis is placed on conversation, modern Hebrew literature, and composition.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 0106 - BIBLICAL HEBREW

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the grammar, syntax and vocabulary of Biblical Hebrew
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 0111 - ELEMENTARY HEBREW 1

Minimum Credits: 4
Maximum Credits: 4
This course introduces students to the fundamentals of the Hebrew language. We study basic vocabulary, grammar and sentence structure, and learn to read and write Hebrew. Emphasis is learning to speak the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 0112 - ELEMENTARY HEBREW 2

Minimum Credits: 4
Maximum Credits: 4
Continuation of the introductory work begun in Hebrew 1. Students further develop their reading, writing and speaking skills with the greatest emphasis being placed on oral communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 1065 - BIBLICAL HEBREW

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HEBREW 1259 - ISRAELI FILM AND TELEVISION

Minimum Credits: 3
Maximum Credits: 3
This course will survey different aspects of Israeli culture and society as reflected in Israeli cinema and television since the establishment of the state in 1948. No previous knowledge of Hebrew or Israel required. All readings will be in English and we will watch films and TV with English subtitles. Students with proficient Hebrew may enroll in HEBREW 1906 for a 1 credit add-on to work with Hebrew sources.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement

HEBREW 1902 - DIRECTED STUDY - UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 4
Students may undertake a variety of individual reading or research projects under the close supervision of a faculty member. Regular meetings are required. Permission of the Jewish Studies coordinator and the faculty member required.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

HEBREW 1905 - UNDERGRADUATE TEACHING ASSISTANT

Minimum Credits: 1
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

HEBREW 1906 - HEBREW LANGUAGE ADD-ON

Minimum Credits: 1
Maximum Credits: 4
Students may complete 1-4 credits of independent work in Hebrew as an add-on to a course in which Hebrew texts are taught in translation. Permission from the instructor is required to enroll.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Health and Physical Activity

HPA 0031 - MODERN DANCE 1

Minimum Credits: 1
Maximum Credits: 1
Introduces the college student to modern dance as a point of view, rather than a particular technique. There will be exercises to increase strength, and flexibility, as well as to teach techniques of movement, exploration and improvisation. Emphasis is on developing a sensitive awareness of one's own body movement in time and space.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 0032 - MODERN DANCE 2

Minimum Credits: 1
Maximum Credits: 1
This course is designed for those students who have mastered beginning dance technique and wish to gain more advanced skills. Advanced technique and compositional work is stressed. Course objectives include increased technical skills, awareness and appreciation of modern dance as an art form, ease in phrasing rhythmical movement and skill in improvisational movement.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

HPA 0033 - BALLET 1

Minimum Credits: 1
Maximum Credits: 1
For absolute beginners introducing them to basic fundamentals of the classic ballet technique.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 0034 - BALLET 2

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 0040 - CHOREOGRAPHY

Minimum Credits: 1
Maximum Credits: 1
The art of making dances. Studies dealing with timing, grouping, energy, quality, etc., Lead to the creation of dances. Designed for students who wish to explore the creative process or for those wanting more advanced dance training.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 0041 - JAZZ 1

Minimum Credits: 1
Maximum Credits: 1
Fundamentals of jazz dance for beginning dance students. Class includes warm-up, center floor, and cross floor movement combinations, contemporary jazz and pop music is emphasized.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

HPA 0042 - JAZZ 2

Minimum Credits: 1
Maximum Credits: 1
A continuation of the basic fundamentals learned in Jazz 1. More emphasis is placed on longer routines and more complicated movement sequences. It is an intermediate jazz class.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

HPA 0044 - DANCE PRODUCTION

Minimum Credits: 2
Maximum Credits: 2
This course is designed to familiarize students with both the technical and production aspects of dance and to increase appreciation of dance in all its forms.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

HPA 0050 - SPORTS AND DRUGS

Minimum Credits: 1
Maximum Credits: 1
This course presents medical and scientific information about the use of drugs in sports. It is especially designed for college athletes, but should also be of interest to students preparing for careers in athletic training, coaching, exercise science, health and physical education, physical therapy, and sports medicine.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

HPA 0060 - INTRODUCTION TO DANCE

Minimum Credits: 3
Maximum Credits: 3
A comprehensive overview of dance as an art form and physical activity, covering the history and philosophy of dance. Dance will be examined as a means of communication and expression, and its relationship to other art forms. A particular emphasis will be placed on Western dance forms and its multicultural roots.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 0196 - FIRST AID AND CPR

Minimum Credits: 2
Maximum Credits: 2
A 2-credit lab/lecture discussion course in which American Red Cross techniques of cardiopulmonary resuscitation (CPR) for the professional rescuer and community first aid and safety are presented. In addition to these skills, current methods of management and treatment of emergency illnesses and injuries are also taught. American Red Cross certification available to all students who meet the standards.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 0244 - DANCE PRODUCTION 2

Minimum Credits: 2
Maximum Credits: 2
This course is designed to familiarize students with both the technical and production aspects of dance in all its forms. The students will have experiences with lighting, costume, choreography, public relations, and stage management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 0473 - DANCE PEDAGOGY

Minimum Credits: 2
Maximum Credits: 2
This course is designed for physical education majors and all students with a desire to learn the how and why of teaching dance in an educational program. Through the lectures the students will cover the educational components of dance, i.e., Dance in education, dance for elementary and secondary schools, dance history and dance resources. The movement lab will introduce the students to the fundamentals of movement.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 0474 - LIFETIME ACTIVITIES 1

Minimum Credits: 1
Maximum Credits: 1
An introductory course for prospective instructors of health and physical activity. Includes experiences in the following: group exercise focused on aerobic, resistance, and flexibility; aquatic exercise, dance, yoga, Pilates, and others. Also covers topics such as history, safety, and methods of training and conditioning.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Health and Physical Activity (BS)

HPA 0475 - LIFETIME ACTIVITES 2

Minimum Credits: 1
Maximum Credits: 1
An introductory course for prospective instructors of health and physical activity that expands on the content taught in HPA 0474 (lifetime activities 1). Includes experiences in the following: group exercise focused on aerobic, resistance, and flexibility; aquatic exercise, dance, yoga, Pilates, and others. Also covers topics such as history, safety and methods of training and conditioning.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Health and Physical Activity (BS)

HPA 0477 - INTRODUCTION TO EXERCISE SCIENCE

Minimum Credits: 1
Maximum Credits: 1
This course will introduce students to the field of Exercise Science and its related professions. This course is intended for those students considering Exercise Science and its related professions as an academic major and for career placement. This course will involve exposure to the history and contemporary opportunities within Exercise Science that will involve both lecture and applied experiences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 0497 - WATER SAFETY INSTRUCTOR

Minimum Credits: 2
Maximum Credits: 2
The water safety instructor course is designed to earn certification to teach American Red Cross swimming and water safety courses. The course

focuses on planning, organizing, sequencing, skill development, and Red Cross operational policies and procedures.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 1011 - APPLIED HUMAN ANATOMY

Minimum Credits: 3
Maximum Credits: 3
This is a non-laboratory lecture discussion course in which all body systems are investigated. Primary emphasis is placed on the skeletal, articular, muscular, cardiovascular and nervous systems. In addition, the basic mechanical principles underlying human movement and an understanding of human structure are used to analyze movement and physical skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 1012 - APPLIED HUMAN ANATOMY LAB

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 1031 - RESEARCH IN SPORTS SCIENCE

Minimum Credits: 3
Maximum Credits: 3
A course designed to provide the student an understanding of the role of measurement and evaluation in the educational process, the ability to select and/or develop and administer appropriate tests, and the ability to use appropriate mathematical and statistical techniques in data analysis. Additionally the student will gain an introduction to the research process as practiced in health, physical education and sport.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health and Physical Activity (BS)

HPA 1033 - HUMAN PHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Develops knowledge of the functions of the human body. Covers the major systems (e.g., Circulatory, digestive, endocrine, excretory, nervous, reproductive, thermoregulatory). Introduces key concepts for understanding the physiological basis of human performance in sport, dance, and exercise.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 1034 - EXERCISE SCIENCE SEMINAR 1

Minimum Credits: 2
Maximum Credits: 2
This one credit course will provide an introductory overview of the academic discipline and profession of exercise science and its related fields. The course will also provide established guidelines and procedures necessary for those students enrolled in the university of Pittsburgh movement science undergraduate program.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: Health and Physical Activity (BS

HPA 1035 - EXERCISE SCIENCE SEMINAR 2

Minimum Credits: 1
Maximum Credits: 1
This one credit course will provide final exposure to the profession of exercise science and its related fields. The course will also provide established guidelines and procedures necessary for professional interviews, resume, and other requirements necessary for job or graduate school application in an exercise or other health related field.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1033 and 1011 and 1012 and 1042 and 1485 and 1044 and 1486 and 1031 and 0474 and 0475; CUM GPA 2.50; PLAN: Health and Physical Activity (BS)

HPA 1042 - PHYSIOLOGY OF EXERCISE

Minimum Credits: 3
Maximum Credits: 3
A lecture and laboratory class in which the effects of exercise and sport upon body systems will be investigated. Reviews knowledge concerning physiological mechanisms which relate to improvements of physical performance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1033 and 1011 and 1012; CUM GPA 2.50; PLAN: Health and Physical Activity (BS)

HPA 1044 - BIOMECHANICS

Minimum Credits: 3
Maximum Credits: 3
Required course for undergraduate students in athletic training, exercise science, and teacher education. Provides studies to develop knowledge of biomechanical concepts and principles. Includes experiences to develop proficiency in the diagnosis of motor performance errors. Also places emphasis on applications of biomechanics in making curriculum and instruction decisions in physical education programs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1011 and 1012; CUM GPA 2.50; PLAN: Health and Physical Activity (BS)

HPA 1045 - DIRECTED RESEARCH PRACTICUM

Minimum Credits: 2
Maximum Credits: 2
Students complete a comprehensive review of literature on a movement-related problem and then, under the guidance of a faculty member, design, conduct, and report an original research project.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: HPA 1031 (MIN GRADE 'C-'); CUM GPA 2.5

HPA 1141 - FITNESS FOR INSTRUCTORS

Minimum Credits: 2
Maximum Credits: 2
Fitness for instructors will teach the student the major elements of fitness. How to assess fitness levels, determine fitness goals, design fitness programs and facilities. The course will be a combination of classroom, exercise, and practical experiences.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

HPA 1169 - HEALTH FITNESS PRACTICUM 1

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: HPA 0474 and 0475 (MIN GRADE 'C-'); PLAN: Health and Physical Activity (BS), CUM GPA 2.50

HPA 1170 - HEALTH FITNESS PRACTICUM 2

Minimum Credits: 1
Maximum Credits: 1
This 1-credit course will provide HPA students the opportunity to observe, implement and practice the application of exercise testing, assessment and prescription, training, group instruction, and supervision in the health-fitness field using principles and techniques related to the HPA curriculum in a real health and fitness setting.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 0474 and 0475 (MIN GRADE 'C-') and HPA 1169 (MIN GRADE 'C'); CUM GPA 2.50; PLAN: Health and Physical Activity (BS)

HPA 1171 - RESISTANCE TRAINING INSTRUCTOR

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide students with the knowledge and practical skills needed to work one-on-one with fitness participants and to lead resistance training groups including: basic machine and free weight training skills; proper resistance training techniques; machine and free weight positioning; kinematics and placement; resistance training modifications and utilization of equipment such as kettle bells, stability balls, medicine balls, resistance bands and other tools. Upon completion of this course, students will be competent to develop high quality resistance training programming. It will provide necessary instructor skills such as leadership, appropriate exercise selection and program design, and effective cueing. Students will experience introductory leadership in a variety of traditional and contemporary modes of resistance training instruction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 0474 AND HPA 0475 (MIN GRADE 'C-')

HPA 1172 - GROUP FITNESS INSTRUCTOR

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide students with the knowledge and practical skills needed to lead contemporary group exercise classes including Indoor Cycling, Water Aerobics, Aquatic Conditioning, Boot Camp Fitness, etc. Upon completion of this course, students will be competent to lead dynamic, high quality group exercise. It will provide necessary instructor skills such as leadership, appropriate exercise selection and program design, and effective cueing. Students will experience introductory leadership in a variety of traditional and contemporary modes of resistance training instruction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 0474 AND HPA 0475 (MIN GRADE 'C-')

HPA 1173 - AEROBICS INSTRUCTOR

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide students with the knowledge and practical skills needed to lead aerobic group exercise classes including: General aerobics, hi-lo, step and Kickboxing. Upon completion of this course, students will be competent to lead dynamic, high-quality group exercise classes. It will provide necessary instructor skills such as leadership, appropriate exercise selection and program design, and effective cueing. Students will experience introductory leadership in a variety of traditional and contemporary modes of resistance training instruction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 0474 AND HPA 0475 (MIN GRADE 'C-')

HPA 1174 - YOGA AND PILATES INSTRUCTOR

Minimum Credits: 1
Maximum Credits: 1

This course is designed to provide students with the knowledge and practical skills needed to lead Yoga and Pilates group exercise. Upon completion of this course, students will be competent to lead dynamic, high-quality group exercise classes in Yoga and Pilates. It will provide necessary instructor skills such as leadership, appropriate exercise selection and program design, and effective cueing. Students will experience introductory leadership in a variety of traditional and contemporary modes of resistance training instruction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 0474 AND HPA 0475 (MIN GRADE 'C-')

HPA 1175 - CARDIO CONDITIONING INSTRUCTOR

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide students with the knowledge and practical skills needed to lead cardiovascular conditioning group exercise classes including: General aerobics, hi-lo, step, cycle exercise, Kickboxing, and others. Upon completion of this course, students will be competent to lead dynamic, high-quality group exercise classes with a focus on cardiovascular conditioning. It will provide necessary instructor skills such as leadership, appropriate exercise selection and program design, and effective cueing. Students will experience introductory leadership in a variety of traditional and contemporary modes of cardiovascular conditioning exercise.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 1211 - ATHLETIC INJURY PREVENTION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide the student with an introduction to the athletic training profession. Topics to include medical terminology, mechanisms of injury, and recognition and treatment of common athletic injuries to major body parts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: HPA 1212

HPA 1212 - ATHLETIC INJURY PREVENTION LABORATORY

Minimum Credits: 1
Maximum Credits: 1
An introduction to basic taping techniques and injury evaluation techniques used in the profession of athletic training. Basic supportive strappings and paddings for immediate care and competition are presented as well as basic joint evaluation procedures, massage, and crutch fitting.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: CREQ: HPA 1211

HPA 1224 - FITNESS ASSESSMENT AND EXERCISE PRESCRIPTION

Minimum Credits: 3
Maximum Credits: 3
Fitness for instructors will teach the student the major elements of fitness. How to assess fitness levels, determine fitness goals, design fitness programs and facilities. The course will be a combination of classroom, exercise, and practical experiences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1033, HPA 1011 AND HPA 1012; PLAN: Health and Physical Activity

HPA 1226 - ASSESSMENT AND PRESCRIPTION FOR SPECIAL POPULATIONS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1224, HPA 1033, HPA 1011 and HPA 1012; PLAN: Health and Physical Activity (BS)

HPA 1233 - PRINCIPLES OF STRENGTH AND CONDITIONING

Minimum Credits: 2
Maximum Credits: 2
Instruction is provided describing the principles for development of pre-season, in-season and off-season strength and conditioning programs. Laboratory experiences will include the theory and techniques of operating strength training equipment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 0474, HPA 0475, HPA 1033, HPA 1011 and HPA 1012; PLAN: Health and Physical Activity (BS)

HPA 1241 - TEACHING EXPERIENCE 1

Minimum Credits: 1
Maximum Credits: 1
One term clinical teaching experience with an instructor in "basic instruction physical education". Responsibilities include: teaching undergraduate students basic skills, physical fitness, and safety.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 1242 - TEACHING EXPERIENCE 2

Minimum Credits: 1
Maximum Credits: 1
One term clinical teaching experience with an instructor in "basic instruction physical education". Responsibilities include teaching undergraduate students basic skills, physical fitness, and safety.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HPA 1300 - NUTRITION IN EXERCISE AND SPORT

Minimum Credits: 1
Maximum Credits: 1
This course will provide the student with basic nutritional information as it pertains to sport and exercise performance. Topics of discussion include weight reduction and management, nutritional requirements for athletic performance and maintenance of a healthy lifestyle, proper eating habits, diet fads, disordered eating, and supplementation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 1485 - NUTRITION AND HEALTH

Minimum Credits: 3
Maximum Credits: 3
Nutrition and energy intake have been linked to health related outcomes. The focus of this course will be on educating students on the basic principles of proper nutrition, and how nutrition plays a role in the prevention and treatment of chronic diseases.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health and Physical Activity (BS)

HPA 1486 - BEHAVIOR CHANGE STRATEGIES

Minimum Credits: 3
Maximum Credits: 3
This course will focus on behavioral strategies for modifying health related behaviors. Primary focus will be placed on physical activity, eating

behaviors, and weight control. Emphasis will be placed on practical application of behavioral principles in health related environments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health and Physical Activity (BS)

HPA 1487 - CHRONIC DISEASE AND OBESITY

Minimum Credits: 3
Maximum Credits: 3
This course will focus on treatment approaches to obesity including behavioral, pharmacological, and surgical procedures. This will involve expanding on existing knowledge of energy balance, physical activity, nutrition, and behavior modification. The application of this knowledge will encompass the development of interventions to address the obesity epidemic and provide practical knowledge in this area.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1033, HPA 1485, HPA 1031, and HPA 1224

HPA 1488 - WEIGHT MANAGEMENT AND PHYSICAL ACTIVITY

Minimum Credits: 2
Maximum Credits: 2
This course is designed for students who meet the clinical criteria for being overweight (body mass index > 25 kg/m2) and who desire to lose weight, improve their nutrition, and increase their exercise. This course will combine instruction on behavioral techniques to lose and maintain weight loss along with supervised cardiovascular and resistance exercise. Students will be assessed at the beginning and end of the course to monitor changes in weight, body composition, fitness and other factors.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

HPA 1489 - CONSIDERATIONS FOR HEALTH AND FITNESS PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1224 and HPA 1031

HPA 1491 - TEACHING HEALTH AND WELLNESS IN ELEMENTARY SCHOOLS

Minimum Credits: 3
Maximum Credits: 3
This class will focus on those factors that affect the health and well-being of children and how teachers may, through their work, promote the health of children both in and outside the educational setting. We will learn the importance of both promoting a healthy lifestyle within the young and the importance of advocating for a healthy environment in which all children and adults may flourish. Students will plan learning activities that will enhance the health knowledge, skills, attitudes and experience of young children.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPA 1995 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
A flexible curriculum oriented to special research topics of interest to faculty or current issues of concern to educators. Focused on areas within either developmental movement and sport studies or exercise physiology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PLAN: Health and Physical Activity (BS)

HPA 1996 - CLINICAL INTERNSHIP

Minimum Credits: 12
Maximum Credits: 12
Supervised clinical experience for the B.S. Degree student. The student is placed in a clinical setting appropriate to his/her degree interests and career goals and must complete a minimum of 25 hours of clinical work per credit hour. Supervision is provided by both a cooperating clinical supervisor and the university clinical advisor.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade
Course Requirements: PREQ: HPA 1485, HPA 1011, HPA 1012, HPA 1031, HPA 1033, HPA 0474, HPA 0475, HPA 1224, HPA 1044, HPA 1042, HPA 1486, (HPA 1169 or 1170), HPA 1233, HPA 1487, HPA 1226, HPA 1489, and HPA 1035 (MIN GRADE 'C-')
Course Attributes: Undergraduate Internship

HPA 1998 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 6
The student proposes and carries out an independent study project under the direction and supervision of an appropriate member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: H/S/U Basis

Health and Rehabilitation Scs

HRS 1000 - INTRODUCTION TO RESEARCH

Minimum Credits: 3
Maximum Credits: 3
The study of the nature of research and the applications of the scientific approach in the research procedures. The course focuses on concepts, design techniques and interpretations, as well as limiting factors and ethical considerations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: NS-BS, NS-BS (NSNDMS-TR), ND-MS (NSBS-TR)

HRS 1006 - INTRO TO HUMAN NUTRITION

Minimum Credits: 3
Maximum Credits: 3
This course will cover an overview of the scientific principles of nutrition and application of these principles to humans throughout the life cycle. Major focuses of the course are the classification and function of the six major nutrients, review of current nutrition standards, safety of the food supply, and nutrition misinformation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HRS 1008 - APPLC OF STATCL CONCEPTS IN HIM

Minimum Credits: 3
Maximum Credits: 3
Designed to present student with the understanding of the research process. Student learns to analyze scientific reports to communicate with statisticians when research problems arise.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1009 - ORGANIZATIONAL THEORY & BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
The primary purpose of this course is to facilitate the student's attaining a more comprehensive, integrated and useful understanding of organizational culture, systems and behavior. The overall emphasis will be on formal organizations in both the public and private sector, however, the theory and concepts will be transferable to any type of organization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition (BS)

HRS 1011 - ANATOMY AND PHYSIOLOGY, AND PATHOPHYSIOLOGY, MEDICAL TERMINOLOGY AND PHARMACOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course has multiple topics, including an introduction to the structure of human cells, tissues, organs and organ systems, and functions associated with them; a general overview of the predisposing factors and direct causes of disease, as well as their effects on the human body; an introduction to pharmacology; and word construction, pronunciation, spelling, definition and use of terms related to all areas of medical science, hospital service and health related professions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HRS 1017 - INTRODUCTION TO EPIDEMIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce basic concepts of epidemiology for professionals in health and rehabilitation. Descriptive epidemiology, morbidity and mortality studies, and experimental epidemiology will be some of the topics explained and addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Global Studies

HRS 1018 - SURVEY OF HEALTH AND REHABILITATION PROFESSIONS

Minimum Credits: 2
Maximum Credits: 2
An interdisciplinary faculty team will introduce students to health science professions in physical therapy and athletic training, occupational therapy, speech-language pathology and audiology, rehabilitation counseling, health information management, rehabilitation technology, emergency medicine, and disability studies. Classes will feature lectures and hands-on activities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

HRS 1020 - ANATOMY AND PHYSIOLOGY

Minimum Credits: 4
Maximum Credits: 4
Introduces the structure of human cells, tissues, organs and organ systems, and functions associated with them. Range of topics extends from gross anatomical features to considerations of chemical processes that serve as the basis for cellular controls, gene expression and energy metabolism. Emphasis on relationship of structure to function and on understanding how structural or functional disturbances can become the basis for disease processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1023 - HUMAN PHYSIOLOGY

Minimum Credits: 4
Maximum Credits: 4

This course has been designed in an effort to provide pre-clinical students with a foundational scientific knowledge base and conceptual understanding of physiological processes. Each organ system, and its contribution to the maintenance of homeostasis, will be discussed. Further, the essential components of each system will be explored, to the extent that life is supported. Some disease states will be discussed, in order to exhibit certain processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition(BS or BSH or BPH) or (NDNUTR-ND) or (NS-BS)

HRS 1025 - INTRODUCTION TO MICROBIOLOGY

Minimum Credits: 3
Maximum Credits: 3
An overview of medical microbiology introduces the student to medically important bacteria, fungi, viruses, parasites and to immunity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HRS 1027 - PATHOPHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide a general overview of the predisposing factors and direct causes of disease, as well as their effects on the human body. It will also include a systemic approach to the basic disease processes, in terms of etiology, symptomatology, general pathological changes, diagnostic procedures, and types of treatment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1052 - TOPICS IN CLINICAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: Sch Hlth & Rehabilitation Scs

HRS 1095 - COMMUNITY CONNECTOR COURSE

Minimum Credits: 2
Maximum Credits: 2
This course is especially well-suited for students from SHRS, PHARM, NUR and School of Social Work. This seminar focuses on the patient population which is a high risk population who are vulnerable to frequent readmissions to the hospital. Emphasis will be placed on: 1) understanding this patient population, the health system and health behavior challenges associated with this population, and systematic needs associated with reducing their health care needs 2) The course will include presentations by researchers, clinicians, and healthcare industry experts. Students will need to be available for approximately 6, out-of-classroom activities during the semester. This course will expose students to the patient population through visits with clinicians at the hospital, home, and community, including in-home assessments, patient education sessions, and behavior change (motivational interviewing) techniques. Students may me paired with a nurse, speech language pathologist, occupational therapist, or physical therapist during one of these activities. Each out-of-classroom visit often requires a 4-hour block of time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HRS 1099 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Provides advanced students an opportunity to explore in depth an area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial.
Academic Career: Undergraduate

Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis

HRS 1421 - SECURITY, PRIVACY AND LEGAL ISSUES OF HEALTH INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Students in this course will explore legal, security, and privacy issues related to health information systems. Data availability, integrity and confidentiality of databases and networks, computer security, public key infrastructure, encryption/decryption techniques, and data recovery will be addressed as well as risk assessment, security policies, HIPAA, privacy, applicable health laws, and ethical issues in the management of health information.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1422 - COMPUTER PROGRAMMING FOR HEALTH INFORMATICS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce advanced computer programming technologies. The course will provide students with skills of solving real health informatics problems using computer programs. This course is not designed as first computer programming class. The instructor assumes that students have taken and are familiar with one or a few programming languages (such as BASIC, C/C++, JAVA, C#, PERL, PYTHON, RUBY) prior to taking this class. One or multiple programming languages may be used in this class to solve health informatics problems. This course is hands-on and project-oriented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1424 - DATA BASE MANAGEMENT IN HEALTH CARE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HRS 1425 - GENOMICS AND PERSONALIZED CARE

Minimum Credits: 3
Maximum Credits: 3
This course is designed as an introductory-level course to data analytics and its application in genomics. In this course, students will learn techniques on data collection, data processing, modeling, data visualization, and result interpretation. Specific examples from genomics will be used to demonstrate the details of these techniques. Students will work on individual projects to extensively practice their data analytics skills. A number of web-based data analysis tools will be used in this course; therefore, students are not required to write their own data analysis programs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1515 - REHABILITATION PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course explores rehabilitation psychology and the target population of this clinical psychology specialty, individuals with chronic illness and disability. Psychology and health professionals, regardless of their chosen career profession, will encounter persons with chronic illness and disability (CID). This course provides an overview of key concepts in working with individuals with CID, a discussion of different populations presenting with CID, and examination of evidence based approaches to intervention, and a review of diverse contexts in which counseling and psychology professions treat and interact with persons with CID.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HRS 1700 - COLLEGE ACHIEVEMENT AND CAREER PREPARATION SEMINAR

Minimum Credits: 1
Maximum Credits: 1
This course will focus on career development and job-placement theories, legislation, constructs, and research for persons with disabilities. Through this lens, the course will cover the history of and current practices related to self-advocacy, success strategies, and rights and responsibilities of persons with disabilities. The course will cover time management and goal setting, development of an individual educational plan and identification of services and programs that will lead to college success, and career planning including job-search and employer-negotiation strategies and identification of community, state, and national resources of employment assistance. Using enablement and disablement models, leaders in the disability community will be invited to discuss their career pathways. The course will specifically focus on occupational and labor market information related to assistive technology and related health science and engineering. This course may be of interest to students with disabilities; students pursuing careers related to disability support, policy, or legislation; special education; and vocational/rehabilitation counseling.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

HRS 1701 - INTRODUCTION TO ORTHOTICS AND PROSTHETICS

Minimum Credits: 2
Maximum Credits: 2
This will be a lecture, seminar, and laboratory course introducing some of the applied science and clinical aspects of the orthotics and prosthetics professions. Topics include: an overview of the profession; introduction to some basic anatomy, kinesiology and biomechanics related to orthotics and prosthetics; some pathologies, disabilities, injuries treated with orthoses or prostheses; introduction to patient evaluation and measurement; and introduction to fabrication of custom orthotics and prosthetics, using laboratory equipment. The course will be taught using hypothetical or actual case studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HRS 1702 - FUNDAMENTALS OF REHABILITATION ENGINEERING & TECHNOLOGY 1 LAB COMPONENT

Minimum Credits: 1
Maximum Credits: 1
This is the 1-credit lab component associated with HRS 1704. It is optional, for those who wish to get the hands-on experience in a clinic setting. Do not register for this course if you have not also registered for HRS 1704. Introduction to fundamental principles and practices related to multiple areas of assistive technology. Technology areas include: seating and wheelchair mobility, augmentative communication, environmental control, computer access, transportation safety, prosthetics, worksite ergonomics, and man/ machine modeling. In addition, common terminology, disability ethics and models of service delivery related to assitive technology are discussed.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade

HRS 1704 - FUNDAMENTALS OF REHABILITATION ENGINEERING & TECHNOLOGY 1

Minimum Credits: 2
Maximum Credits: 2
Introduction to fundamental principles and practices related to multiple areas of assertive technology. The technology area includes: seating and wheelchair mobility, augmentative communication, environmental control, computer access, transportation safety, prosthetics, worksite ergonomic, and man/machine modeling. In addition, common terminology, dis ability, ethics, and models of service delivery related to assistive technology are discussed. **This course has been 3 credits in the past, which included a hands-on lab component. Due to the need for social distancing, this course is now 2 credits with an optional 1-credit lab component. If you wish to take the lab component, please also register for HRS 1702.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1706 - INTRODUCTION TO REHABILITATION ENGINEERING DESIGNS

Minimum Credits: 4
Maximum Credits: 4
This course is the first course in a two-course sequence on Rehabilitation Engineering Design. HRS 1706/2706 is in the Fall, and 1718/2718 is in the Spring. HRS 1706/2706 covers the fundamentals of product design and development with a particular emphasis on assistive and rehabilitative technologies. The goal of this course is for students to learn both the process and the tools necessary to develop high-quality designs. The tools we focus on include sketching, computer aided drafting, fabrication and programming. The design process is discussed throughout the class, and relies on a textbook and a series of videos that can be accessed through the internet.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: University Honors Course

HRS 1709 - DSGN/FABRICATION WITH ENGR MATLS

Minimum Credits: 1
Maximum Credits: 1
Course designed to teach students basic skills of designing and fabricating mechanical mechanisms and components. Solely lab based and will use "learn by doing" approach. Students gain experience working with engineering materials such as wood, plastics, aluminum, brass and steel. Fabrication techniques of turning, milling, cutting, drilling, tap ping and welding will be used. Participate in the design and fabrication of various devices with increasing complexity. Shop safety, tool section, and equipment maintenance will be an important component of the course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: H/S/U Basis
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1718 - PROJECT BASED TECHNOLOGY DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course is the second course in a two-course sequence on Rehabilitation Engineering Design. HRS 1706/2706 is in the Fall, and 1718/2718 is in the Spring. HRS 1718/2718 is a project-based design course in which students use design methods and tools learnt in 1706/2706, follow an iterative design and testing process with clients and experts, and develop assistive technology device prototypes for their clients.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1746 - SERVICE LEARNING THROUGH SUPERVISED FIELD PLACEMENTS IN REHAB AGENCIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: HRS 1730 or 1732; MIN GRADE: 'C-' for listed Courses

HRS 1905 - INTER-PROFESSIONAL STUDIES IN HEALTH, REHABILITATION AND DISABILITY IN IRELAND

Minimum Credits: 2
Maximum Credits: 2
This short spring-break study abroad program is designed for a broad range of students with health-related interests. The course will help students develop inter-disciplinary clinical and research insights while addressing health, disability, rehabilitation and related issues. The programs provides students with an early introduction to the scope of practice of related disciplines and to models of inter-professional practice. Dublin, Ireland delivers an international context and learning opportunity that allows students to appreciate the influences of different policies and systems on collaborative clinical practices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 1906 - EDUCATION POLICY AND PRACTICE IN NORTHERN IRELAND

Minimum Credits: 3
Maximum Credits: 3
In this course, which will involve a combination of classroom and community based learning, students will learn about education policy and practice within the social and cultural context of Northern Ireland. Students will explore a wide range of topics including: education policy with specific reference to special education needs, the role of play in cognitive development, physical literacy, issues of disadvantage and mental health, models of collaborative, inter-professional practice, inclusion and equity in education, and community engagement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 2004 - PATHOPHYSIOLOGY ACROSS THE LIFE SPAN

Minimum Credits: 4
Maximum Credits: 4
This course is designed to provide the student with a comprehensive theoretical foundation of the phenomena that produce alterations in human physiologic function in diverse populations across the life span. Information gained in this course will prepare the student for subsequent courses related to the diagnosis and management of disease processes associated with pathophysiologic dysfunction/alterations in people of various ethnic/cultural groups across the life span.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

HRS 2008 - ENTREPRENEUR SKILLS FOR NUTRITION PROFESSIONALS

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the components of business planning, implementation and marketing for dietetics related products and services in a variety of settings. Working in teams and independently, students will identify potential products and services, develop business and marketing plans including financial and staffing considerations and present their plan to a panel of their peers and potential "buyers".
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PLAN: (Coordinated Mster in Dietetics); or SUBPLAN: (Clinical Dietetics & Nutrition) or (Wellness and Human Performance)

HRS 2623 - ADVANCED MEDICAL NUTRITION THERAPY 1

Minimum Credits: 3
Maximum Credits: 3
This is the first of a two-course sequence in advanced medical nutrition therapy. This course will build on the student's knowledge of medical nutrition therapy from her/his undergraduate coursework and will focus on the application of the nutrition care process at the practitioner level. The course will cover pathophysiology and treatment, nutrition implications, nutrition assessment and diagnosis, and nutrition interventions for acute and chronic diseases based on evidence-based research and guidelines. Teaching approaches for the course include lectures, guest speakers, assigned readings, in-class discussions, and problem-based learning through case studies.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS) or Nutrition and Dietetics (MS)

HRS 2624 - ADVANCED MEDICAL NUTRITION THERAPY 2

Minimum Credits: 2
Maximum Credits: 2
This is the second of a two-course sequence in advanced medical nutrition therapy. This course will build on the student's knowledge of medical nutrition therapy from her/his undergraduate coursework and HRS 2623 and will focus on the application of the nutrition care process at the practitioner level. The course will cover pathophysiology and treatment, nutrition implications, nutrition assessment and diagnosis, and nutrition interventions, including nutrition support, for acute and chronic diseases based on evidence-based research and guidelines. Teaching approaches for the course include lectures, guest speakers, assigned readings, in-class discussions, and problem-based learning through case studies.
Academic Career: Graduate
Course Component: Lecture

Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2625 - NUTRITION COUNSELING METHODS

Minimum Credits: 3
Maximum Credits: 3
This is an advanced course that emphasizes counseling as a supportive process, characterized by a collaborative counselor-patient relationship that involves behavior and attitudinal change. It will focus on the conceptual foundations and philosophy of behavior change theories, with an emphasis on motivational interviewing, including application in practice to provide the learner with a collection of evidence-based strategies and counseling skills to promote behavior change in patients/clients.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS) or Health and Rehabilitation Scs (MS) or SBPLAN: Wellness and Human Performance or Clinical Dietetics & Nutrition

HRS 2631 - NUTRITION FOCUSED PHYSICAL EXAMINATION

Minimum Credits: 3
Maximum Credits: 3
Introduction to professional knowledge and skills in nutrition focused physical examination. The course is based on the knowledge/application of the NCP and Model in professional practice. Learning experiences will include formal class presentations, class discussions, case-based problem solving and simulation laboratory sessions. Knowledge based learning leading to examination technique simulations for anthropometric measurements for body composition, nutrition focused physical examination for malnutrition diagnosing and examination techniques, e.g., vital signs, head and neck exam, intra and extra-oral exams, heart and lung auscultation, as well as, abdominal auscultation and palpation are included. At the completion of the course competency in application of nutrition focused physical examination techniques will be assessed on an individual basis.
Academic Career: Graduate
Course Component: Credit Laboratory
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS) or Nutrition and Dietetics (MS)

HRS 2633 - PROFESSIONAL DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course provides students with opportunities to explore through study, discussion and practical application, the issues and trends that are affecting food and nutrition professionals and the profession of dietetics. Included is an introduction to the history and structure of the profession of dietetics and to existing and emerging roles.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS) or Nutrition and Dietetics (MS)

HRS 2635 - PROFESSIONAL DEVELOPMENT

Minimum Credits: 2
Maximum Credits: 2
This course provides students with opportunities to explore through study, discussion and practical application, the issues and trends that are affecting food and nutrition professionals and the profession of dietetics. Included is an introduction to the history and structure of the profession of dietetics and to existing and emerging roles.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade

HRS 2637 - PRACTICAL APPLICATIONS OF MEDICAL NUTRITION THERAPY 1

Minimum Credits: 1
Maximum Credits: 2
This weekly conference is designed to prepare students for their planned, supervised practice experiences to be completed at the assigned clinical facility. Teaching approaches for the course include lectures/presentations, group discussions, student presentations, guest lectures, and problem-based learning through case studies. Class exercises are designed to simulate supervised practice assignments and provide opportunity for the student

to apply didactic content to the practice of food service management and the nutrition care process used in patient care. Class participation is an important component of the course. Group discussions are used to report on events and share experiences in order to broaden the class's perspective on dietetics practice in the acute care setting.
Academic Career: Graduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2638 - PRACTICAL APPLICATIONS OF MNT 2

Minimum Credits: 1
Maximum Credits: 1
This weekly conference is designed to prepare students for their planned, supervised practice experiences to be completed at the assigned clinical facility. Teaching approaches for the course include lectures/presentations, group discussions, student presentations, peer review exercises, and problem-based learning through case studies. Class exercises are designed to simulate supervised practice assignments and provide opportunity for the student to apply didactic content to the nutrition care process used in patient care. Class participation is an important component of the course. Group discussions are used to report on events and share experiences in order to broaden the class's perspective on dietetics practice in the acute care setting.
Academic Career: Graduate
Course Component: Practicum
Grade Component: Grad HSU Basis
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2640 - SUPERVISED PRACTICE : COMMUNITY NUTRITION

Minimum Credits: 2
Maximum Credits: 2
This course is a combination of dietetics related classroom, observation and supervised practice experiences in community settings. Emphasis is on delivering food and nutrition services in community based settings with a focus on wellness. Core rotations are in the following areas: child and adult day care, WIC and breastfeeding support, congregate and home delivered meals (Meals-On-Wheels), schools, the Western Pennsylvania School for Blind Children, food banks and pantries and community-based wellness programs. Students are required to complete the core rotations and to meet course requirements through special projects in sites of their choice across the lifecycle. Course minimum: 120 hours.
Academic Career: Graduate
Course Component: Clinical
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2642 - SUPERVISED PRACTICE: CLINICAL 1

Minimum Credits: 5
Maximum Credits: 5
This course will provide supervised practice experience in the area of clinical dietetics. This course is designed to follow the topic sequence and content of HRS 2623: Advanced Medical Nutrition Therapy 1. It provides the students with the opportunity to apply their knowledge of the nutrition care process and medical nutrition therapy (MNT) to the practice of dietetics in the acute care setting. This involves planned learning experiences with a variety of patients at various stages of the health/illness continuum. Students will have opportunity to observe and then model the functions of a clinical dietitian. Through the combination of planned learning activities and professional interaction, the students will demonstrate increasing level of proficiency in providing comprehensive nutritional care to individuals within the practice setting. This course is the first of two courses which will provide clinical dietetics supervised practice experience. In this course the initial skills required for the nutrition care process will be mastered: nutrition assessment, diet interviewing, developing a care plan, written documentation, and nutrition education/counseling. Supervised practice experience caring for patients with the following disease states will be provided: feeding difficulties, energy imbalances, cardiovascular diseases, diabetes mellitus, and renal disease. During this course the student will begin to develop and construct their Quality Improvement (QI) Research project. This project will give each student the opportunity to work independently on a QI project at the primary clinical site. The project should focus on an area that is relevant to the site's Clinical Nutrition Department and/or the field of clinical dietetics. This is a two term project that will continue into HRS 2643: Supervised Practice: Clinical II.
Academic Career: Graduate
Course Component: Clinical
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2643 - SUPERVISED PRACTICE: CLINICAL 2

Minimum Credits: 5
Maximum Credits: 5

This course is the second of two courses which will provide supervised practice experience in the area of clinical dietetics. This course is designed to follow the topic sequence and content of HRS 2624: Advanced Medical Nutrition Therapy 2. It provides the students with the opportunity to apply their knowledge of nutrition assessment and medical nutrition therapy to the practice of dietetics in the acute care setting. This involves planned learning experiences with a variety of patients of all ages at various stages of the health/illness continuum. Students will have opportunity to observe and then model the functions of a clinical dietitian. Through the combination of planned learning activities and professional interaction, the students will demonstrate increasing level of proficiency in providing comprehensive nutritional care to individuals within the practice setting. Students will be assigned to their same primary site as the fall term; however selected rotations outside of the primary site may be necessary to provide appropriate learning activities. This course will build on skills mastered in HRS 2642 and will provide the students supervised practice experiences to develop and master new skills including calculating and assessing enteral and parenteral nutrition regimens. Supervised practice experience caring for patients with the following disease states/conditions will be provided: gastrointestinal, pancreatic, and liver disorders, cancer, critical illness, and patients requiring nutrition support. During this course the student will complete their Quality Improvement (QI) Research project. This project will give each student the opportunity to work independently on a QI project at the primary clinical site. The project should focus on an area that is relevant to the site's Clinical Nutrition Department and/or the field of clinical dietetics. This is a two term project that will build on the project content from HRS 2642.
Academic Career: Graduate
Course Component: Clinical
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2644 - SUPERVISED PRACTICE: MANAGEMENT OF NUTRITION CARE

Minimum Credits: 2
Maximum Credits: 2
The supervised practice experience activities for HRS 2644: Management of Nutrition Care are planned to provide the student with the opportunity to assume increased responsibility for the management of nutrition care to hospitalized patients. In this course, the student will function as a clinical dietitian at the clinical site and will independently conduct all phases of the nutrition care process. Students will continue in the same primary supervised practice facility where they were assigned for Supervised Practice: Clinical 1 and 2.
Academic Career: Graduate
Course Component: Clinical
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2645 - SUPERVISED PRACTICE MANAGEMENT IN LONG-TERM CARE

Minimum Credits: 2
Maximum Credits: 2
This course provides supervised practice experience in a long-term care setting. The course will provide supervised practice experience is in the areas of food service management and also clinical dietetics to allow the student to carry out the nutrition care process for patients/residents in this population.
Academic Career: Graduate
Course Component: Clinical
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Coordinated Mster in Dietetics (MS)

HRS 2646 - FUNCTIONAL NUTRITION

Minimum Credits: 3
Maximum Credits: 3
This introductory course to functional nutrition is based on a food first approach to promotion of optimal health. Lectures and class activities will explore the scientific basis of medicinal foods and herbs used in cooking. Students will demonstrate practical application by incorporating 'health promoting foods and herbs' into meal planning and preparation with the goal of optimizing health for the prevention and treatment of diet and lifestyle related diseases.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Cord Mster in Nutr and Dietics (CMD-MS) or Wellness and Human Performance (MSNUTR-SP)

HRS 2650 - EXERCISE PHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide graduate students, within the field of rehabilitation science, the knowledge of theoretical and applied aspects of exercise physiology. An in-depth understanding of how the body responds when exposed to acute and chronic bouts of exercise will be provided

through lectures and laboratories. Topics discussed will include physiological responses and adaptations of the cardiovascular, respiratory, metabolic, and neuromuscular systems to exercise; assessing cardiorespiratory fitness, body composition, anaerobic performance and muscular fitness; designing exercise programs for health and wellness and special populations; sport performance; environmental considerations.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade

HRS 2655 - RESEARCH METHODS AND APPLIED STATISTICS

Minimum Credits: 3
Maximum Credits: 3
This introductory course in research methods and applied statistics will address research study design and descriptive and inferential statistics related to the research process. Inferential statistics will include one-sample, two-sample and multi-sample inference. Topics covered will include issues related to measuring variables (reliability/validity), an introduction to epidemiology and measures of association, and interpreting scientific literature. The course will include hands-on practice in running statistical tests previously taught in class. This course provides awareness about research methods and statistical analysis considerations needed by health sciences students. There are no pre-requisites.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade

Health Information Management

HIM 1020 - HEALTH DATA SCIENCE PROGRAMMING USING PYTHON AND R

Minimum Credits: 3
Maximum Credits: 3
This course introduces the two most widely used statistical programming tools in data science: R and Python. Students will learn how to do data processing of various types of data and prepare the data to be ready for statistical analyses and machine learning. Programming techniques and analyses that are essential for health data scientists will be covered. This course will also cover the applications of graphical techniques and visualization for health data. This course covers how to do programming to implement various statistical methods and machine learning algorithms from the perspective of health data science. The approach of this course is practical, hands-on and project oriented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1210 - HEALTH INFORMATION AND THE HEALTH CARE SYSTEM

Minimum Credits: 3
Maximum Credits: 3
This course will include an introduction the historical development of the health care field with emphasis on the organizational structure of health institutions, as well as federal, state, and local agencies and health informatics and information management associations. Emphasis will be placed on all the key functions that surround health informatics, health information management and data science and the use of technology, regulations, ethical principles and legal implications regarding these key functions. Information governance, data governance and the integrity of the health data that is used by health care organizations will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1250 - FOUNDATIONS OF HEALTH INFORMATICS AND INFORMATION MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to health informatics and information management including important concepts in computing and networking, digital health, data analytics, machine learning, data science, health technology intervention, electronic health records, data quality, health care standards, privacy and security, bioinformatics and digital imaging. Students will engage in hands-on applications of these concepts as well.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1405 - MEDICAL TERMINOLOGY, PHARMACOLOGY AND PATHOPHYSIOLOGY

Minimum Credits: 1
Maximum Credits: 1
This course is a basic study of the professional language of medicine. It is designed to include word construction, pronunciation, spelling, definition, and use of terms related to all areas of medical science, hospital service, and health related professions. This ONLINE course is designed to give the student a knowledge of words frequently used in the medical field and provides examples through the review of basic anatomy, physiology, surgical procedures, diagnostic procedures, and symptomatology. Coverage of the pathology of each body system is will take place along with an introduction to pharmacology, and the pharmacological treatment of frequently occurring conditions of each body system.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1406 - DATA MANAGEMENT AND ANALYTICS FOR HIM PROFESSIONALS

Minimum Credits: 2
Maximum Credits: 2
The major emphasis of this course is to teach students the process of transferring data into information. This is achieved through a study of database theory, analysis and design, and the teaching of skills in database management systems in the health information environment. Other software tools will be presented in this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: HIM 1407; PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1407 - DATABASE MANAGEMENT AND ANALYTICS FOR HIM PROFESSIONALS LAB

Minimum Credits: 1
Maximum Credits: 1
Students will work extensively with Microsoft Excel, Access, and SQL to gain practical experience in design and implementation of databases. Students will also learn important business/consulting skills that include presenting data as information, writing, executive summaries, preparing professional reports that highlight data findings.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: CREQ: HIM 1406; PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1415 - INTRO HEALTH INFOR & HLTH CARE

Minimum Credits: 3
Maximum Credits: 3
An introduction to Health Information Management and the historical development of the health care field with emphasis on the organizational structure of health institutions, as well as federal, state, and local agencies and allied health associations. Student will be introduced to Health Information Management operations and key functions, with an overview of the American Health Information Management Association (AHIMA). Emphasis will be placed on the use of technology in health care, Electronic Health Record, and data quality. An in-depth look at privacy, confidentiality and security will occur.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: HIM 1416; PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1416 - INTRO HEALTH INFOR LAB 1

Minimum Credits: 1
Maximum Credits: 1
The laboratory experience provides students with hands-on opportunities to apply the theory and concepts of health information. The content, format, purpose, confidentiality, adherence to regulations/standards and technology applications for health information will be emphasized. Laboratory activities, group discussions, and case studies will supplement basic instructions.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: CREQ: HIM 1415; PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1420 - ORGANIZATIONAL THEORY & BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
The primary purpose of the course is to facilitate the student in attaining a better, i.e., more comprehensive, well integrated and more useful, understanding of the organizations in which she/he will be spending considerable time and energy for her/his career. The emphasis will be on formal organizations both in health care and other sectors of the economy. Models and concepts developed within the closely related disciplines of organization theory and organization behavior will be addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BS)

HIM 1430 - LEADERSHIP

Minimum Credits: 3
Maximum Credits: 3
Leadership is a course designed to introduce and develop leadership behaviors. The goal of this course is to advance the capabilities in meeting current healthcare organization's challenges through both leader and leadership development. It is not intended to provide a background on the evolution of thought on leadership or leadership theory. The course takes a developmental ânot training âapproach by providing a leadership development framework that helps guide one in acquiring the characteristics and behaviors associated with good leadership.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1437 - CLASSIFICATION SYSTEMS IN HEALTHCARE

Minimum Credits: 3
Maximum Credits: 3
This course will enable the student to apply the principles of taxonomy as well as understand the purposes of classifying diseases and operations. An in-depth study of ICD-10-CM, ICD-10-PCS and CPT-4 will be undertaken along with an introduction to ICD-11. The interaction of Diagnosis Related Groups (DRG's) with classification systems will be emphasized. Data quality, the Uniform Hospital Discharge Data Set as well as coding/sequencing guidelines for both inpatient and outpatient coding will be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1438 - CANCER REGISTRY THRY & PRACT LAB

Minimum Credits: 2
Maximum Credits: 2
Designed to provide students with practical experience in the design, development, performance and administration of various types of research databases. Primary focus is the organizational and operational functions of a cancer registry. Medical management of patient, physiology of disease process methodology used in evaluation extent of disease and assessing outcome through patient follow-up, use of ICD-O classification system is presented. Impact of data quality and availability in relation to utilization of the registry is stressed.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: CREQ: 1435 and 1436; PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1440 - HIM CLINICAL EDUCATION 1

Minimum Credits: 1
Maximum Credits: 1
Clinical affiliation at contracted health care sites under the supervision of qualified health information management personnel. Student assignments are structured to provide actual experience in the technical and clinical areas of health information management, such as record retention and retrieval, release of information, coding and abstracting, chart analysis, etc.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H); PREQ: 1415 and 1416; CREQ: 1435 and 1436

HIM 1442 - APPLC OF STATCL CONCEPTS IN HIM

Minimum Credits: 3
Maximum Credits: 3
Designed to provide students with a practical understanding of the use of statistics in health information management (HIM). This course will focus on management and organization of health information data and the appropriateness of using specific statistical techniques with data. Descriptive statistics, inferential statistics, and non-parametric methods will be discussed and utilized with HIM data or concepts. Database development, research articles and projects will be used to learn the meaning of statistics and its use in the field of HIM.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1445 - HUMAN RELATIONS IN HLTH CARE

Minimum Credits: 2
Maximum Credits: 2
This course discuses principles of effective communication and interpersonal relationships. Course material will include information concerning communication skills, group therapy, diversity, conflict management, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1451 - DATABASE DESIGN AND BIG DATA ANALYTICS

Minimum Credits: 3
Maximum Credits: 3
This course will provide students with the theoretical and technical aspects of database, specifically in data modeling, design of database, as well as learning the "language" to manage database. The second section will address advanced topics in database and big data, including transforming data, data warehousing and data mining, and analysis and visualization of data. Students will work extensively with Microsoft Excel, Access, and SQL server to gain practical experience in design and implementation of health-related databases. Students will also learn important healthcare business/consulting skills that include presenting data as information, writing executive summaries, and preparing professional reports that highlight healthcare data findings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1452 - DIGITAL HEALTH AND ELECTRONIC HEALTH RECORD SYSTEM

Minimum Credits: 3
Maximum Credits: 3
Digital health technologies include solutions for both health care providers and patients, ranging from Electronic Health Records, Telemedicine, Mobile Health, Wearable Devices, as well as many emerging Internet-of-Things devices and sensors. This course will provide students with opportunities to explore; analyze, and discuss key issues, principles and policies surrounding digital health. The responsibilities of the health informatics and information management professional, as well as the requirements of accrediting and licensing agencies related to digital health technologies will also be discussed. The final assignment of this course will task students to work with key health service stakeholders (who will share their knowledge throughout the course as well) to investigate and propose a practical digital health solution to tackle a specific health issue.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1454 - DATA SCIENCE IN HEALTH INFORMATICS

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course to health data science and will cover data sources, types, collection methods, processing and analysis methods, and analysis result interpretation with an emphasis in health-related data. Assigned hands-on projects will enable students to have the skills to analyze various types of health data sets using different methods and have the ability to interpret the meaning of the results.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIM 1455 - QUALITY MANAGEMENT

Minimum Credits: 2
Maximum Credits: 2
This course focuses on principles and approaches to assessment of quality in health care and how this impacts the role of the health information manager. Theoretical and pragmatic issues related to quality management, utilization review, and risk management is addressed. Responsibilities of the governing board, medical staff and other health care personnel in relation to quality management and improvement is examined. Requirements of accrediting and licensing agencies related to quality management are presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: HIM 1456; PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1456 - QUALITY MANAGEMENT LAB

Minimum Credits: 1
Maximum Credits: 1
This quality management laboratory focuses on the practical applications of managing the quality of health care, resource use, and risk. Students will design, implement, and present a quality management project at designated clinical facilities. Also, several in-class/online assignments will be required.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: CREQ: HIM 1455; PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1460 - HIM CLINICAL EDUCATION 2

Minimum Credits: 1
Maximum Credits: 1
Practice and introduction to areas of impact for health information: revenue cycle management, quality assessment, case and care management, data analysis and business intelligence and information security areas.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H); PREQ: 1455 and 1456; CREQ: 1465

HIM 1462 - EPIDEMIOLOGY

Minimum Credits: 2
Maximum Credits: 2
This course is an introductory course in epidemiology and epidemiologic methodology for the HIM student. It includes types and purposes of epidemiology, measures of risk, and sources of data. There will be an emphasis on epidemiological student designs related to HIM and Health Informatics. Students will design an epidemiological research proposal as part of the course requirements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1465 - REIMBURSEMENT SEMINAR

Minimum Credits: 1
Maximum Credits: 1
An introduction to topics relating to reimbursement in the health care environment. The course will build on topics covered in Classification Systems including the role of coding in reimbursement and minimizing health care fraud. Additional areas include payment methodologies, revenue, and payment cycle management, claims audits, compliance, value-based purchasing and outpatient prospective payment systems. Clinical Documentation Improvement Programs and the increased use of CAC programs will also be explored.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1470 - SUPERVISION HUMAN RESOURCES HC

Minimum Credits: 3
Maximum Credits: 3
This course discusses the principles and methods practiced in human resource management in the health care environment. The role of the supervisor is emphasized, and practical applications in con junction with theory are presented to the student.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H); PREQ: 1420

HIM 1475 - HIM NON-TRADITIONAL SETTING

Minimum Credits: 3
Maximum Credits: 3
An overview of health information systems in community-based facilities emphasizing information requirements of ambulatory-care centers, behavioral health, substance abuse, rehabilitation, emergency medicine, occupational health, long-term care, sub-acute care, home health care, hospice, dialysis, managed care, correctional facilities, dental care, and veterinary care settings. The role of the health information manager as a consultant in these settings is discussed. HIM consultants/professionals in these areas are invited to lecture as guest speakers from each of these settings. A 20-hour project is a major component and entails having the student conduct the project as a consultant in one of the health care areas listed above.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H); CREQ: 1480

HIM 1480 - HIM CLINICAL EDUCATION 3

Minimum Credits: 2
Maximum Credits: 2
This clinical education experience provides students the opportunity to observe and participate in health information management activities in a variety of non-acute settings such as long-term care, ambulatory care, behavioral health, rehabilitation, home health, outsourcing companies, IT departments, and telemedicine.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H); CREQ: 1475

HIM 1482 - LEGAL ASPECTS OF HEALTH CARE

Minimum Credits: 2
Maximum Credits: 2
This course discusses principles of hospital law and aspects of hand ling confidential and health records information. Actual cases and statutes are discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1485 - SYSTEMS ANALYSIS IN HLTH CARE

Minimum Credits: 3
Maximum Credits: 3
The presentation of concepts of systems analysis and their relationship to health record management is a major emphasis of this course. Case problems and individual projects from health-care settings are assigned to develop proficiency.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1486 - FINANCIAL MANAGEMENT FOR HIM

Minimum Credits: 2
Maximum Credits: 2

This course is designed as an intro level course to principles, concepts and issues of financial management in a health care organization. Focus on financial management viewed from the perspective of department/credit manager and supervisor. Institution-wide accounting and budgeting systems are discussed primarily as a framework for understanding how financial re porting, planning and control is linked to organizational effectiveness and how financial management responsibilities of the departmental manager relate to organization-level financial goals.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1490 - ELECTRONIC HEALTH RECORDS

Minimum Credits: 3
Maximum Credits: 3
This course addresses theoretical and pragmatic issues related to EHR technology, such as design and development, standards and clinical terminologies, privacy and security issues, model EHR systems, evaluation of EHR software systems, and outcomes research using the EHR will be addressed. The responsibilities of the health information management professional, as well as the requirements of accrediting and licensing agencies related to EHR, will also be discussed. The responsibilities and involvement of various members of the health care team in the development, use, evaluation, and dissemination of EHR technology will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1495 - HIM CLINICAL EDUCATION 4

Minimum Credits: 4
Maximum Credits: 4
This clinical experience involves a six-week clinical affiliation at contracted health care sites or health-related organizations under the supervision of qualified practitioners or health information management professionals. Student assignments are structured to provide actual experiences in the administrative, managerial, technical and project-oriented areas of health information management, such as electronic health records development and training, project management, systems analysis, human resource management, health information systems, database management, and other similar experiences.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)

HIM 1496 - CAPSTONE COURSE IN HIM

Minimum Credits: 3
Maximum Credits: 3
This is the final capstone course where the faculty will assess students' attainment of all the required professional competencies in health information management (HIM). This will be determined by completing the senior project, an independent project in which the student serves as a consultant to a particular health care facility in order to solve a problem. It will also be determined by completing a poster presentation of the senior project, the study preparation, taking both a mock exam developed by the HIM department based upon its curriculum and taking an entry-level nationally validated exam administered by AHIMA.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Health Information Management (BPH or BS or BS-H)
Course Attributes: Capstone Course

HIM 1499 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Provides student an opportunity to explore in depth an area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis

HIM 1650 - INTRO TO STATISTICS AND RESEARCH DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide students with a practical understanding of the use of statistics in health informatics and information management (HIIM). Descriptive statistics, inferential statistics, and some non-parametric statistics will be discussed and utilized with healthcare data or concepts. The use of Excel and SPSS will be used to run statistical tests and understand the meaning of the output generated. Research articles and statistical projects will be used to learn the meaning of statistics and its use in the field of HIIM. Epidemiology and epidemiologic research design and methods for the HIIM student will also be included. Types and purposes of epidemiology, measures of risk, and sources of data will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Health Phys & Recreation Educ

HPRED 1489 - SPECIAL CONSIDERATIONS FOR HEALTH AND FITNESS PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Hindi

HINDI 0101 - HINDI 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Global Studies

HINDI 0102 - HINDI 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0281 or HINDI 0101; MIN GRADE: 'C'
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, Global Studies

HINDI 0103 - HINDI 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: LING 0282 or HINDI 0102; MIN GRADE: 'C'
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, Global Studies

HINDI 0104 - HINDI 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0283 or HINDI 0103; MIN GRADE: 'C'
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, Global Studies

HINDI 0111 - INTRODUCTION TO HINDI LANGUAGE IN INDIA

Minimum Credits: 3
Maximum Credits: 3
This study abroad course will provide a basic introduction Hindi language for students with no or very little background in Hindi. It does not take the place of HINDI 0101 - Hindi 1 taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HINDI 0112 - CONTINUING HINDI LANGUAGE IN INDIA

Minimum Credits: 3
Maximum Credits: 3
This study abroad course provides students with some background in Hindi to continue their language study. It does not take the place of a regularly sequenced Hindi language course taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HINDI 1615 - MANY RAMAYANAS: TRADITION AND DIVERSITY IN MODERN INDIA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce you to the great Hindu epic, the Ramayana, a blue-print for daily living in India. Although composed two millennia ago, the remarkable fluidity of the story has resulted in literally hundreds of Ramayanas, as it continues to be retold and reimagined while moving across space and time. Within the Ramayana itself there are many controversial episodes; among these the two most important are Sita's trial-by-fire and her subsequent banishment by her husband, Rama, and Rama's mutilation of Shurpanakha as punishment for the latter's bold romantic and sexual overtures. These incidents are of great import because the faithful and loyal Sita is the "Ideal Indian woman" in popular imagination even today. More significant is the fact that authors and commentators continue to use both these characters to address modern issues relating to gender inequality. The Ramayana is thus a rich source of information not just in literary terms, although its defining characteristic, its fluidity, is under threat, with groups on the ultraright attempting to dictate the "correct" version , but also in political, social and religious terms. This course will thus take a multi-disciplinary role in exploring the richness of what modern scholars have come to call the Ramayana tradition, and its role in India today; we will study its implications for women, its reception in South India, and its role in the rising tide of Indian nationalism, while eventually questioning whether its characteristic fluidity is at threat by those who insist on only one "pure" version.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement

HINDI 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate

Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

HINDI 1905 - UNDERGRADUATE TEACHING ASSISTANT IN HINDI

Minimum Credits: 1
Maximum Credits: 3
Undergraduate Teaching Assistant for Hindi Language Class
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

HINDI 1909 - SPECIAL TOPICS IN HINDI

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Portuguese

PORT 0101 - ELEMENTARY PORTUGUESE 1

Minimum Credits: 3
Maximum Credits: 3
Basic elements of Brazilian Portuguese emphasizing a development of speaking, reading and writing skills. Introductory course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PORT 0102 - ELEMENTARY PORTUGUESE 2

Minimum Credits: 3
Maximum Credits: 3
The second half of this introductory course continues to develop skills in the speaking, reading and writing of Portuguese.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PORT 0101 or 1001 (MIN GRADE 'C' for Listed Courses)
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement, Latin American Studies, West European Studies

PORT 0103 - INTERMEDIATE PORTUGUESE 3

Minimum Credits: 3
Maximum Credits: 3
A continuation of the development of conversational as well as writing skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PORT 0102 or 1002 or 1010 (MIN GRADE 'C' for Listed Courses)
Course Attributes: African Studies, Latin American Studies, West European Studies

PORT 0104 - INTERMEDIATE PORTUGUESE 4

Minimum Credits: 3
Maximum Credits: 3
Follows PORT 0103. A consolidation of speaking, reading and writing skills.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: PORT 0003 or 0103 or 1003 (MIN GRADE 'C' for Listed Courses)
Course Attributes: African Studies, Latin American Studies, West European Studies

PORT 0120 - CONVERSATION

Minimum Credits: 3
Maximum Credits: 3
An intermediate course in Portuguese conversation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PORT 0004 or 1004 (MIN GRADE 'C' for Listed Courses)
Course Attributes: Latin American Studies, West European Studies

PORT 0125 - GRAMMAR AND COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
An intermediate course in grammar and composition for those who have completed PORT 0004/0104 or the equivalent.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PORT 0004 or 1004 (MIN GRADE 'C' for Listed Courses)
Course Attributes: Latin American Studies, West European Studies

PORT 1001 - ELEMENTARY PORTUGUESE 1

Minimum Credits: 5
Maximum Credits: 5
Basic elements of Brazilian Portuguese emphasizing a development of speaking, reading and writing skills. Introductory course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: MIN CUM GPA: 2.0
Course Attributes: African Studies, Latin American Studies, West European Studies

PORT 1002 - ELEMENTARY PORTUGUESE 2

Minimum Credits: 5
Maximum Credits: 5
The second half of this introductory course continues to develop skills in the speaking, reading and writing of Portuguese.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PORT 0001 or 1001; MIN GRADE: 'C' FOR ALL LISTED COURSES
Course Attributes: African Studies, Latin American Studies, West European Studies

PORT 1003 - INTERMEDIATE PORTUGUESE 3

Minimum Credits: 3
Maximum Credits: 3
A continuation of the development of conversational as well as writing skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PORT 0002 or 1002 or 1010; MIN GRADE: 'C' FOR ALL LISTED COURSES
Course Attributes: African Studies, Latin American Studies, West European Studies

PORT 1004 - INTERMEDIATE PORTUGUESE 4

Minimum Credits: 3
Maximum Credits: 3
Follows PORT 1003. Consolidation of speaking, reading and writing skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PORT 0003 or 1003; MIN GRADE: 'C' FOR ALL LISTED COURSES
Course Attributes: Latin American Studies, West European Studies

PORT 1010 - PORTUGUESE FOR SPANISH SPEAKERS 1

Minimum Credits: 3
Maximum Credits: 3
Portuguese for Spanish speakers is designed as an accelerated introductory course for native speakers of Spanish or English speakers with fluency in Spanish. It will be the equivalent of Portuguese 0001/1001 and Portuguese 0002/1002. This course concentrates on aspects of the Portuguese language that are most difficult for Spanish speakers, such as pronunciation, vocabulary, idioms and grammatical structures particular to Portuguese.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies, West European Studies

PORT 1031 - ELEMENTARY PORTUGUESE 1 FOR MBAS

Minimum Credits: 2
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PORT 1052 - LUSO-BRAZILIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course studies various Portuguese or Brazilian literary topics according to the needs and interests of the students. Taught in Portuguese.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Latin American Studies

PORT 1053 - LUSO-BRAZILIAN TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course deals with literary, linguistic or cultural topics, or a combination of these, relating to Portugal, brazil or other Portuguese speaking areas.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies

PORT 1061 - SURVEY OF BRAZILIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
A general overview of Brazilian literature from the middle ages to the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PORT 1458 - CULTURES OF THE PORTUGUESE SPEAKING WORLD

Minimum Credits: 3
Maximum Credits: 3
This course presents an overview of the contemporary cultures of the Portuguese-speaking world It is especially designed for students with little to no previous knowledge of these geographical regions. In the course, students will explore contemporary social realities throughout the Portuguese-speaking world (namely Brazil, Angola, Mozambique and Cape Verde) through the close and critical reading of texts, literature, film, short videos, podcast episodes, TV programs, among other mediums. Students will be exposed to issues regarding gender, race, nation, sexuality, class, status, among other issues within a contemporary context. Students are expected to engage in critical discussions with the materials and the varying perspectives of their peers. The purpose of this course is not to merely passively digest content but to also think and express oneself critically in reaction to cultural representations both from the perspective of the respective nation and also from US perspectives. It is also necessary to keep in mind that rather than attempting an exhaustive survey of the Portuguese-speaking world in its entirety, the course provides merely a glimpse into the cultural offerings of these diverse and vast geographical regions; it is also an attempt to promote global and cultural understanding. Hopefully, through this exposure, it is also a starting point for further exploration and research in studies of the Portuguese-speaking world and beyond.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PORT 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 6
This course allows students to work in depth in areas of their choice, with the approval and supervision of a faculty member, who meets regularly with the student. Evaluation is by examination or by the production of a term paper or series of papers.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

History

HIST 0010 - PROFESSIONAL DEVELOPMENT SEMINAR

Minimum Credits: 1
Maximum Credits: 1
You are at a family function and one of your relatives over hears what your major is asks you "do you know what you call a BA in history?" Then before you can answer or walk away, he/she responds with "waiter!" While this is the accepted wisdom of what happens to a history, is this the reality of life after college? The answer to that is an emphatic "no!" Therefore, in this class you will find out why this is false. Then you will prepare for the real world by practicing and implementing the skills needed to navigate your way through the process of finding a job or going on to graduate school.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: History (BA or MN)

HIST 0050 - SOCIAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0089 - MAGIC, MEDICINE AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Dietary purges, ritualistic spells, mystical transformation, and the balance of self with nature. In each of these approaches is the presence of magic. Magic is a phenomenon common to all societies. In this course, we will study how it has contributed to religion, medicine, the healing arts, and to the emergence of modern scientific thought. Also the extent to which similar systems of belief have given birth to science, religion, magic and therapeutic practice will be explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 0100 - WESTERN CIVILIZATION 1

Minimum Credits: 3
Maximum Credits: 3
The study of others leads back to ourselves. We learn about men and women from the past in order to compare their experience to our own, hoping that the comparison will make us more aware of the opportunities and limitations of present-day life. As an introduction to history, this course tries to suggest the excitement and uncertainties of studying the past. We begin at the time of the crusades, and continue through Renaissance and Reformation to the eve of Industrial Revolution.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 0101 - WESTERN CIVILIZATION 2

Minimum Credits: 3
Maximum Credits: 3
A history of the West from the Industrial Revolution to the late Twentieth Century, the period when Europe and its overseas extensions dominated world history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies, West European Studies

HIST 0103 - EUROPE IN THE 18TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
It was the best of times, it was the worst of times; it was the age of wisdom, it was the age of foolishness; it was the epoch of belief, it was the epoch of incredulity; it was the season of light, it was the season of darkness. There was a king with a large jaw and a queen with a plain face on the throne of England; there was a king with a large jaw and a queen with a fair face on the throne of France. In both countries it was clearer than crystal to the lords of state, preservers of loaves, and fishes that things in general were settled forever. This course surveys the political, economic, social, and cultural history of Europe in the eighteenth century. Focusing on the major transformations of European society from the Age of Absolutism through the Age of Enlightenment to the Age of Revolution, the course explores local and interconnected histories of Britain, France, Spain, Denmark, Sweden, Russia, Austria, and the Dutch Republic. The course engages five major themes: 'Power, Politics, and Warfare', 'Social, Demographic, and Economic Change', 'Culture, Religion, and the Public Sphere', 'European Expansion Overseas', and 'Revolutionary Europe.' Readings include primary and secondary sources. The course is open to students of all levels.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0125 - RELIGIONS OF THE WEST

Minimum Credits: 3
Maximum Credits: 3
This course is a historical introduction to the religious traditions that developed in ancient Near East and the Mediterranean. Our major emphasis is on the history of the religious traditions that emerged in late antiquity in this area and which continue to be major world religions: Judaism, Christianity, and Islam. We will also touch on Zoroastrianism. We focus on key concepts, historical developments, and contemporary issues. Throughout the course, we also examine interactions among these religious traditions. In the last part of the course we examine the issue of globalization and the spread of these religions around the world as well as the presence of "non-Western" religion in the "West." The course also serves as an introduction to the academic study of religion and provides a foundation for further coursework in Judaism, Christianity, and Islam. No prior knowledge of any of the religions studied is expected or assumed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0139 - VIKING AGE SCANDINAVIA

Minimum Credits: 3
Maximum Credits: 3
The Viking age, the period from 800 to 1050 AD Marks Scandinavia's transition from prehistoric to historic times. This course will reassess Viking activities as constructive as well as destructive. Raids, commerce and colonization are best illuminated by a blending of written and physical evidence. Through the sagas, secondary readings and an assessment of archaeological sources such topics as state formation, trade, technology, rise of cities, religion and the voyages to Greenland and America will be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0140 - THE HISTORY OF THE BOOK

Minimum Credits: 3
Maximum Credits: 3
This course examines European book history in global context, from clay tablets through the age of print. Focusing primarily on the medieval and early modern periods, it considers the history of the book from several perspectives: as a story of technologies, both manual (papermaking, printing) and intellectual (literacy, memory), as a story of artistic and cultural forms, as a story of reading, and as a story of global networks. We will consider issues including forgery; censorship; the role of political, religious, and economic forces in the production of books; the development of trust in the written word; the history of libraries; and the formation of reading communities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement

HIST 0150 - HISTORY OF MODERN IRELAND

Minimum Credits: 3
Maximum Credits: 3
This class will examine how Britain came to Ireland and why in the context of that period (16th and 17th centuries). It will also examine the very complex relationships between the Catholic church and the British crown in the 17th century, as these relationships played a great role in the Cromwellian era. This will lead us to the heart of the class where we will trace the very complex relationship between modern Irish republicanism and Cromwell.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0187 - WORLD WAR II-EUROPE

Minimum Credits: 3
Maximum Credits: 3
The causes of WW II are surveyed, including World War I, the Russian Revolution, the Great Depression, and the rise of fascist regimes. The determinants of German expansionism will be discussed and related to the outbreak of war in 1939. The military struggle receives attention, but such topics as economic mobilization, propaganda, occupation policies, resistance movements and the Holocaust are also discussed. The course concludes with an analysis of war time diplomacy, the Postwar settlement, and the onset of the Cold War.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 0190 - THE DICTATORS

Minimum Credits: 3
Maximum Credits: 3
This course examines and compares the dictatorships of Hitler's Germany and Stalin's Soviet Union. We shall investigate the official methods and media that transmitted the ideologies and aimed to manufacture consent for national socialism and Stalinist communism. On the basis of myths, public art, films, spectacle, and mass culture of the regimes, we shall discuss such topics as leader cults, construction of utopias, cultural revolutions,

identities, and the role of propaganda and entertainment.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0200 - EAST CENTRAL EUROPE

Minimum Credits: 3
Maximum Credits: 3
This course is devoted to the exploration of the historical experience of the lands between Germany and Russia from the time the region was first settled by Nomadic tribes to the present. During these one thousand years Eastern Europe was transformed from feudalism to communism and our emphasis will be to understand the ways in which the interaction of social, economic, intellectual, cultural, demographic and political processes contributed to this metamorphosis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0201 - THE BALTIC SEA: FROM THE VIKINGS TO POST-SOVIET RE-UNION

Minimum Credits: 3
Maximum Credits: 3
In this course we will explore the Baltic Sea region, and trace Northern Europe's history from the age of the Vikings to the post-Soviet re-union in 1991. We will study the history of this region and its diverse language communities: Scandinavians, Finns, Balts, Slavs and Germans. We will discuss how the Baltic Sea region was shaped by several European powers, in particular Denmark, Sweden, Poland-Lithuania, Russia, Prussia, and Germany. The course will cover the history of Northern Europe over the course of the last 1,000 years, including the Vikings, the Hanseatic League, the Reformation, the Thirty Years War, the Nordic Wars, the Enlightenment, Nordic Romanticism, the Russian Revolution, the two World Wars, the Cold War, and the renewal of the Baltic Sea region as a unified trading space after the collapse of the Soviet Union.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0300 - RUSSIA TO 1860

Minimum Credits: 3
Maximum Credits: 3
This course examines the social, political, economic and intellectual developments of Russia from the Great Reforms of Peter to the Emancipation of the Serfs in 1861.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0301 - RUSSIA TO 1917

Minimum Credits: 3
Maximum Credits: 3
This course analyzes the major social and economic problems of the Russian Empire from the emancipation of 1861 through the Revolution of 1917. The emphasis is on understanding the major issues that precipitate the first "socialist" Revolution in European history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0302 - SOVIET RUSSIA

Minimum Credits: 3
Maximum Credits: 3
This course examines the history of the USSR from 1917 to the present. Particular attention is paid to the revolutionary transformation of society, the construction of the Soviet state and Soviet society, and to the ways in which state and society relate.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0400 - EAST ASIAN CIVILIZATION TO 1800

Minimum Credits: 3
Maximum Credits: 3
This course introduces major themes in the history of East Asia. It analyzes the relationships between East Asian thought systems; political, economic, and social institutions; and foreign influences for the purpose of understanding the forces that shaped the East Asian tradition. The course focuses on how this distinctive tradition produced two very different societies in China and Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0401 - MODERN EAST ASIAN CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
This survey of Chinese and Japanese history in the nineteenth and twentieth centuries compares and contrasts the development of these two East Asian nations through a format that includes lectures, discussions, films, and readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0403 - HISTORY OF MODERN SOUTHEAST ASIA: COLONIAL ERA TO PRESENT

Minimum Credits: 3
Maximum Credits: 3
This is an introductory survey course in the political and cultural history of Modern Southeast Asia from 1815 through 1978 or roughly from the growth of European colonialism within the region through the end of the Khmer Rouge regime in Cambodia. It will emphasize the expansion of European influence in the political and economic spheres, the growth of nationalism, and the process of decolonization in Southeast Asia. It will also focus on the new political and cultural forces that transformed the region over the course of the 19th and 20th centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0430 - JAPAN AND THE WEST, 1600 - PRESENT

Minimum Credits: 3
Maximum Credits: 3
This course considers the historical development of two very distinctive societies at opposite ends of the EurAsian continent: Japan and Western Europe. It focuses on the contrasting development of the early modern period-Europe's age of expansion and Japan's age of isolation, the course compares systems of thought, social and political institutions, and the importance of foreign influences in the two societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement,

DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0475 - RELIGION AND CULTURE IN EAST ASIA

Minimum Credits: 3
Maximum Credits: 3
Words have consequences. How a society defines "religion" and "culture" have much to say about how they balance individual freedom and collective responsibility. This course focuses on how religion has been and is practiced in East Asia in modern and contemporary times. We begin with an overview of the major religions in the region (e.g., Confucianism, Daoism, Buddhism, Shinto, folk traditions), and examine various themes to help us learn how religion influences the lives of individuals and the wider societies in which they live. Themes dealt with include the relationship between religion and politics and law; nationalism, terrorism, and secularization; gender, sexuality, and the family; healing, the environment, and ethical behavior; and the life cycle and ritual calendar year. By looking at how these issues unfold in modern China and Japan and at their global significance enable us to better understand how religion shapes our world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 0487 - WORLD WAR II IN ASIA

Minimum Credits: 3
Maximum Credits: 3
The history of the war, 1937-1945, between Japan on the one hand and China, the United States, the soviet union and great Britain on the other. The course stresses the ideological, economic, political, social, diplomatic and military forces in those five countries, and how these forces led to a disastrous war beginning in the late 1930s. The course concludes with a discussion of the allied occupation of Japan and Japan's postwar recovery.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0500 - COLONIAL LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course explores the material history of Latin America during the period of Spanish and Portuguese Colonial Rule, from 1500 to 1825. In it, we will examine the interplay between material conditions (climate, natural resources, flora and fauna, and geographic features) and material culture (built space, technology, commodities, agriculture, as well as cultural products), asking how they shaped human action. Weekly case studies-ranging from pre-contact indigenous agriculture, through the role of technology in the success of Spanish conquistadors, to the impact horses on the Spanish frontier-prompt students to engage with the lived experience of a broad range of people living in pre-independence Latin America.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Latin American Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0501 - MODERN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
History of the Latin American republics from independence, in 1825, to the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Latin American Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0502 - AFRO-LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
A survey of black history in the countries of Latin America, from the period of European conquest (c. 1500) to the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Latin American Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0506 - SPANISH PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is offered in conjunction with HIST 0501, Modern Latin America. It is a supplementary, one-credit Spanish-language recitation, where issues raised each week in history 0501 will be discussed in greater detail in a Spanish-immersion format. This practicum offers an opportunity for students to utilize, reinforce, and deepen the skills they have acquired in foreign language courses. We will listen to Latin American music, read primary sources from political manifestos to poetry, and generally enrich our understanding of Latin America's diverse past even as we improve our Spanish-language conversational fluency. This practicum is a great option for students hoping to study abroad in the future.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Satisfactory/No Credit

HIST 0521 - CARIBBEAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
Examines historical roots of modern Caribbean. Examines major historical developments from period of subjugation of indigenous population through era of slavery to rise of modern nationalism and impact of American intervention. Also analyzes related socioeconomic systems and institutions. Selected country case studies included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Latin American Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0600 - UNITED STATES TO 1877

Minimum Credits: 3
Maximum Credits: 3
This is an introductory, lower division, course that develops the history of United States from the 1400s through the 1880s.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0601 - UNITED STATES 1865-PRESENT

Minimum Credits: 3
Maximum Credits: 3
An introduction to American history from the Civil War to the present which emphasizes selected topics on changes in American society and politics as an earlier agrarian society became an industrial-urban one and as the nation took up an ever larger role in world affairs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0612 - ORIGINS OF AMERICAN CAPITALISM

Minimum Credits: 3
Maximum Credits: 3
This course surveys the history of North American capitalism from the time of the first European settlements up through the emergence of a recognizably modern economy in the aftermath of the Civil War. It focuses in particular on the ways in which ordinary people made a living, how and why those ways changed over time, and what those changes in turn can tell us about the evolving structural determinants of the system as a whole.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0663 - 20THC AFRICAN AMERICAN WOMEN'S HISTORY

Minimum Credits: 3
Maximum Credits: 3
Using both a chronological and topical format, this course will investigate the history, culture, and activism of African American women in the Twentieth Century through readings of historical texts and articles, autobiography, and oral testimony. The content of the course includes an exploration of the responses of African American women to racism, sexism, and class and color consciousness within different historical periods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0670 - AFRICAN AMERICAN HISTORY TO 1877

Minimum Credits: 3
Maximum Credits: 3
This course examines African American history and culture from its inception with the Transatlantic Slave Trade to its transformation during the Civil War. Topics discussed include the African and Native American captivity practices that served as the precursors to African chattel slavery; the origins and rationale behind the creation of the social category of "race;" the differences between African chattel slavery in the French, Spanish, and British colonies; the regional variances in slavery in the southern and northern United States and in Indian nations; methods of resistance used by African American women and men; and the multifaceted ways in which African Americans played a part in the abolitionist movement and in their own emancipations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0671 - AFRICAN AMERICAN HISTORY SINCE 1865

Minimum Credits: 3
Maximum Credits: 3
This course considers the variety of African American reactions, interpretations, and solutions to the oppression that shaped their experiences. We focus on how class, gender, and color inform approaches to black survival and advancement. This course will examine various aspects of African American experiences such as migration, life in the rural South and urban North, work, family, culture, faith, and various forms of resistance and accommodation in the quest for political identity and citizenship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0672 - NATIVES AND NEWCOMERS

Minimum Credits: 3
Maximum Credits: 3
This course will focus on diversifying the narrative of North American history by providing a broad overview of important events, processes, and people that shaped this continent from the fifteenth century to the modern-day. Through a focus on the communities and political institutions created

through contact between Native Americans, people of African descent, and white Europeans, students will learn that the United States and its colonial predecessors were shaped by a multiracial, multicultural group of peoples who created multiethnic settlements in different parts of North America simultaneously. These interactions produced the ideas about race and racism, citizenship, national borders, and political sovereignty we still encounter today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0675 - WITCHES TO WALDEN POND

Minimum Credits: 3
Maximum Credits: 3
A survey of American religious history from the colonial period through the civil war.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

HIST 0676 - RELIGION IN MODERN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course examines the impact of religion as a moral, intellectual, and institutional force in America from 1865 to the present. We seek to understand how religions have both shaped and reflected economic, social, and cultural conditions in the United States. The course format combines lecture with student discussion of religious conflicts and critical moments of cultural change. Documentary films, slides, and local sites are also used. Major emphases include religious responses to intellectual, scientific, and economic change, including Biblical criticism, evolutionary theory, immigration, urbanization, industrialization, Marxism, fascism, racism, feminism, and globalization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0678 - UNITED STATES AND THE HOLOCAUST

Minimum Credits: 3
Maximum Credits: 3
With increasing interest in the Holocaust in Europe, this course focuses on the American side of the Atlantic - on issues of anti-Semitism and anti-immigrant sentiment in this country and on America's response to the Holocaust. We will also look at some post-Holocaust issues as well.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 0685 - UNITED STATES FOREIGN RELATIONS

Minimum Credits: 3
Maximum Credits: 3
The course emphasizes three significant periods of development: (a) the period of origins, 1775-1825, (b) the period of hesitant entry onto the international scene, 1890-1941, and (c) the period of full participation in international affairs, 1941-present. In the process the course endeavors to demonstrate the changing role of such concepts as security, neutrality, isolationism, expansionism, and intervention in the evolution of the nation's conduct of foreign affairs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0687 - US IN THE MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3

This course covers the history of political, economic, and cultural interaction between the United States and the Middle East beginning in the interwar period and continuing forward to the modern day. This course would concentrate on the history of American political and economic ambitions in the region from the 1920s and 1930s to the present. Themes to be explored in this course would include (in no specific order) oil and politics, Islam and the west, hard power versus soft power in diplomacy, American culture and politics post-9/11, and Palestine-Israel as it is conceived in the American mind. Course topics would proceed in a chronological order with details of each major political, diplomatic or military intervention in the Middle East in the twentieth century covered at length in course modules. Course topics would include analyses of the ramifications of American interventions in the region as well as a critique of contemporary U.S. foreign policy in the region.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0700 - WORLD HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course is an introductory survey of world history, by which is meant an overview of major processes and interactions in the development of human society since the development of agriculture some 10,000 years ago. It is a selective overview, emphasizing large-scale patterns and connections in political, social, cultural, technological, and environmental history, yet it also provides balance among regions of the world. It encourages students to apply historical techniques to issues of their own interest.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement

HIST 0705 - AN ENVIRONMENTAL AND CLIMATE HISTORY OF THE WORLD

Minimum Credits: 3
Maximum Credits: 3
This course is a history, from ancient to modern times, of the interactions between human societies and the natural environment, including other forms of life that inhabit our planet. Throughout history, humans have affected the natural environment. Sometimes we have sustained balance with it, but often we have degraded it, with impacts on both nature and society. This course investigates how environmental changes have affected the history of human societies, and also how human activity has transformed nature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0706 - DIGITAL MAPPING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Students enrolled in the Digital Mapping Practicum will learn to make databases and interactive maps on topics related to environmental history. Students will learn how to find and create spatial data, how to create maps and join data to maps, and how to combine maps with text and images to tell historical stories using customized interactive maps.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

HIST 0707 - SEX AND GENDER: A GLOBAL HISTORY OF THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
How do ideas of sex and sexuality change over time? Can we understand global history through the lens of sex? This course will survey topics in global history and the history of sex and sexuality from the eighteenth to the twentieth century. We will explore continuities and changes in the definitions of sex and sexualities, the science and politics of sex and reproduction, the relationships between sex, sexuality, and imperialism, the sexual construction of social and cultural differences in different nations, changing portrayals of sex and sexuality by the state and by the media, social and legal activism with regard to issues of sex and sexuality, and the value of using sex and sexuality as a historical framework for issues in social, cultural, and political history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0709 - HISTORY OF GLOBAL HEALTH

Minimum Credits: 3
Maximum Credits: 3
This course explores the history of global public health from 1850-present. It focuses on the social, political, economic, environmental, and cultural factors that have influenced the development of global health generally and also shaped specific interventions and policies. What are the political and economic roots of health disparities? Why do interventions succeed or fail and what are their long-term consequences? What can we learn from studying the continuities and disparities between modern global health policies and past programs? Historical analysis of theory and practice provides crucial perspective on the field.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement

HIST 0712 - A GLOBAL HISTORY OF TERRORISM

Minimum Credits: 3
Maximum Credits: 3
This course will acquaint students with the remarkably long, diverse and widespread use of strategies of terror to advance political, economic, religious and social agendas. Our analysis will focus upon terror from below that is terror by non-state actors; will range from ancient Greece to the present; and will touch upon every inhabited continent. Using examples from many societies, we will discover that the human motivations for terrorist acts have changed little, but that their expression has changed a great deal, from the days of the Spartacus slave revolt, to the calculated terror of the Algerian revolution, to the media-centered "madmen strategy" of Al-Qaeda and Isis. Our organization will be roughly chronological, and will be combined with a typology of different kinds of terrorism. This inherently comparative approach will enable us to make this a true world history course, moving with ease from place to place, movement to movement, while still having a solid temporal and analytical framework to keep the material coherent.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0713 - A GLOBAL HISTORY OF ANARCHISM

Minimum Credits: 3
Maximum Credits: 3
This course will explore the discourse and history of Anarchism, from its contested origins through the present. It will introduce students to a wide variety of anarchisms in a wide variety of contexts. It will follow the travels and networks of people who were anarchists and who sought to spread anarchist ideas through teaching, activism and, sometimes, violence. It will pay special attention to the world-wide influences and connections of various anarchists and anarchist groups, and it will ask students to think about hierarchies of power, like political and economic systems, not only through the eyes of the anarchists, but also from the perspectives of their opponents.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0751 - ANCIENT WORLDS

Minimum Credits: 3
Maximum Credits: 3
This is a lecture course on the earliest cultures of Egypt, Mesopotamia and China. The approach is comparative. The course will focus on the similarities and the differences in the cultural development of these ancient civilizations, and will stress their contributions and legacies to the civilizations of today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0752 - EMPIRES OF THE STEPPE: EURASIA FROM THE MONGOLS TO THE SOVIET UNION

Minimum Credits: 3
Maximum Credits: 3
Over the last several centuries, EurAsia's domination by successive nomadic steppe empires (stretching from Europe to China) was displaced by new imperial challengers from the periphery (notably Russia, China, and Britain). This course examines the nature of that transition by charting the history of EurAsian empires from the Mongols (thirteenth century) to the present day. From Genghis Khan to Tamerlane to Stalin; between Russian spies, Chinese armies, and the Taliban; spanning silk roads, great games, and more. The empires of the steppe were truly vast in scale, integrating territories usually studied in isolation from one another, and so this course provides important context for separate courses on Russian, eastern European, Chinese, and middle eastern history. The chronological scope of this course is similarly epic, spanning over seven centuries, and thus placing in relief recurring themes related to empires in world history. The thematic emphasis is on geopolitical strategies for imperial rule, but the course will also examine culture, religion, and political economy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0753 - RISE OF ISLAM: 500-1200 CE

Minimum Credits: 3
Maximum Credits: 3
This course seeks to impart an understanding of the Islamic tradition by exploring the religion's formative period. It integrates two intertwined themes: (1) early Islamic empires as geopolitical formations; and (2) the development of ideas, from ritual to philosophy to law. The first centuries of Islam are fascinating for many of the same reasons they are complex and even controversial: Surviving primary sources are fragmented, partisan, and often retrospective; a tremendous range of voices competed to define the new religion; and nearly all subsequent Muslim thinkers would harken back to this period to legitimize their own positions. The central goal is to develop an understanding of the diversity of voices in this early period and consider why certain conceptualizations of religion displaced others; and then follow those voices beyond the Arabian Peninsula to examine manifestations in the North African and Central Asian borderlands.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0755 - RELIGION IN ASIA

Minimum Credits: 3
Maximum Credits: 3
This course serves as an introduction to the major religious traditions of South and East Asia. During the course of the semester, we encounter Hinduism and Jainism; the native Confucian, Daoist (Taoist), and popular traditions of China; and the Shinto, folk and new religions of Japan. Buddhism, which originated in India but later spread to East Asia, is examined in its relation to the history of both Chinese and Japanese religions. We approach these traditions through lectures and discussion based on Chinese classical and popular literature, secondary scholarship, and films, which inform us about cultural and historical context, beliefs, practices, and personal experience. In the process we expect to learn something about the ways in which non-Western religious traditions see themselves and their world on their own terms, and to see how/if they can complement our own worldviews.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 0756 - INTRODUCTION TO ISLAMIC CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
This course aims to introduce students to Islamic and Middle Eastern History from the time of the Prophet (ca. 600 C.E.) to the Iranian Revolution in 1979. We will proceed chronologically, focusing mainly on political events. However, a special emphasis will be given to the formation of the Islamic tradition, its evolution across different regions and cultures in time, and its interaction with other traditions. In the modern era, we will particularly explore the Islamic societies' political, cultural, and military encounter with the rising power of the West in the Middle East. In addition to the several historical processes and developments such as modernization, nation-building, Islamic fundamentalism and globalization, which have shaped the history of the Middle East in the last two centuries, our class discussions will also touch on the main theoretical perspectives that have stamped the studies of Islam and the Middle East. Here, concepts such as orientalism, defensive development, and modernity will constitute our main

focus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0760 - INTRODUCTION TO PUBLIC HISTORY

Minimum Credits: 3
Maximum Credits: 3
The course will introduce students to the theory, methodology, and practice of Public History. Public History is the employment of professional historical methods by public and private agencies to engage communities in shaping the presentation of the past into usable histories. Through the course, students will be able to analyze how Public historians and the Public collaborate to explain individual and collective human behavior through a variety of methods, mediums, and contexts. Moreover, students will learn how Public Historians and the Public create and express historical meaning for their local, state, national, and global communities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 0788 - WOMEN AND MEN IN ANCIENT MEDITERRANEAN SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course examines ancient Mediterranean society, particularly that of Greece and Rome, from the perspective of male and female gender roles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

HIST 0789 - WOMENAND MEN IN ANCIENT MEDITERRANEAN SOCIETY/WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking HIST 0788 as a writing course.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: West European Studies, Writing Requirement Course

HIST 0791 - HEALTH CONTROVERSIES IN HISTORY: ETHICS, PUBLICS, INTERVENTIONS

Minimum Credits: 3
Maximum Credits: 3
Controversies related to human health have dominated the news in recent years, whether the Ebola epidemic in West Africa, Zika virus in Latin America, or measles outbreaks in California, but a sense of context and causation is often lacking in the public discourse. This introductory course explores the historical roots of selected, current controversies in public health and medicine through the examination of specific case studies from a diverse geographical and chronological range. We will identify and explore the broad historical antecedents of current issues and offers points of comparison from times and places distant from our own.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 0795 - HISTORY OF AFRICA BEFORE 1800

Minimum Credits: 3
Maximum Credits: 3

Surveys history of Africa from earliest times to eve of European civilization. Looks at Africa from the inside out and aims at promoting an appreciation of Africa's contribution to world civilization and an understanding of the historical processes that have shaped modern Africa. Major themes and topics include ancient kingdoms, Islam the slave trade and the European contact.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1000 - CAPSTONE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course seeks to acquaint history majors with proper techniques of historical research and writing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: HIST 1001; PLAN: History (BA); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

HIST 1001 - INTRODUCTORY SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course introduces its students to the ways historians work. Either by focusing on various interpretations of a common event or series of events, or by looking at historiographical literature in general, the course demonstrates the diversity of historical interpretation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: History (BA); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: African Studies, Capstone Course, Writing Requirement Course

HIST 1005 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course entails the exploration of a special topic chosen by the instructor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1009 - HISTORY THROUGH ARTIFACTS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to various historical aspects of a society (religious, cultural, economic, political, architectural, etc.) By visiting a specific country after having taken a course on the society. The course provides an experiential dimension to historical understanding.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1014 - COMPARATIVE WITCH HUNTS

Minimum Credits: 3
Maximum Credits: 3
This course examines the European witch hunts of the 16th and 17th Centuries, the anti-Trotskyist "witch hunt" within the Soviet communist party in 1934-1939, and the anti-communist "witch hunt" in the U.S. In 1946-58 to determine if all three qualify as witch hunts. The course's purpose is to have students determine if the three cases are comparable, and why they are or are not.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1016 - THE IRISH IN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course will discuss the causes and consequences of Irish immigration to the United States, from the 17th century to the present. We will discuss the cultural and political effects of Irish immigration, not only upon the United States, but upon Ireland and Ireland's long-time master, Great Britain. We will also examine in detail the experience of Irish immigrants, and compare it to that of other immigrant groups.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1017 - GLOBALIZATION AND HISTORY

Minimum Credits: 3
Maximum Credits: 3
Growing global connections affect all of us. This course explores events and social forces in history that operate at global perspective by examining selected events that occurred simultaneously in many parts of the world such as student protests of the late 1960s, economic downturns and social crises of the mid-1970s, and the effects of the end of the Cold War. Students will be 'assigned' different countries and learn how that society interacted with others inter- nationally. The class includes lectures but will have an emphasis on discussion sections and small group projects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1018 - GLOBAL INEQUALIT: HISTORIES AND DEBATES

Minimum Credits: 3
Maximum Credits: 3
Why are some places so rich and others so poor? Do climate-based, geographic, or other natural factors account for the deep disparities between world regions? Or do these reflect human choices and hierarchies of power, within countries or between them? In this course we debate the causes of global inequality and ask what can be done about it. Are international efforts to shape economic growth in the world's poorest countries triumphing over poverty or making the problem much worse? Is 'international development' a success story, a failure, or a fraud?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1019 - CITIES IN HISTORICAL PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
This course examines five inter-related themes. We begin by exploring how cities have been, are, and continue to be shaped and assembled. We examine urban space and design, and how culture, economics, and technology affect them. We also focus on the evolution of urban center over time, especially from the industrial revolution. Problem created by industrialization gave rise to utopian urban planning, some of the ideas of which have shaped modern cities. We also explore issues relating to racial and class segregation. We end by examining the recent restoration/gentrification of cities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1020 - CITIES OF CULTURAL CONQUEST

Minimum Credits: 3
Maximum Credits: 3
This course will take place in Istanbul, Turkey, and Cordoba and Granada, Spain. Each of these cities witnessed fundamental remaking of its identity following conquest by forces that adhered to a different religion. The course focuses on the impact of the ensuing transformation and its impact on the built environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1024 - HISTORY POP-UP COURSE

Minimum Credits: 1
Maximum Credits: 1
This one-credit course focuses on the history of guns, gun violence, and gun culture from an historical perspective. Guns, gun violence, and societal responses to them change over time and in response to the fluctuation of local, national, and global forces. This course will use an interdisciplinary approach to excavate and explore those trajectories. Some of the questions considered will be: When and how did guns develop? When did they become agents of interpersonal (as opposed to military) violence? How did the trade in firearms fit into broader historical and economic phenomena, like the slave trade and settler colonialism? The course will involve lectures from outside speakers, discussion with the professors, and fieldtrips to local sites/collections. The course encourages students to appreciate the ways in which the historical humanities bring important perspective to the world in which we live today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

HIST 1026 - STATES AND SEX IN THE AMERICAS

Minimum Credits: 3
Maximum Credits: 3
This course will trace the evolution of official interest in popular reproductive practice in the United States, Latin America, and the Caribbean from 1800 to 2000. How and why have states sought to regulate sex and its consequences? How have regulations treated people differently on the basis of race, class, marital status, and sexual orientation? And what rights and protections have women and men sought to demand from states? When have they been successful? This course analyzes the Americas-wide history through which the personal became political.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Intensive Course (WRIT)

HIST 1030 - COMPUTATIONAL METHODS IN HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the use of computational modeling and programming to conduct text-based research in the humanities. Course goals include 1) learning how to identify research questions in the humanities that are amenable to computational analysis and processing and 2) designing and implementing XML-based computational systems to explore those questions. No prior programming experience or knowledge of foreign languages required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1031 - A HISTORY OF CURRENT EVENTS

Minimum Credits: 3
Maximum Credits: 3

This course is designed to open students' eyes to the often misunderstood fact that we do not study history for history's sake, but to better understand the present. The course will be offered with varying themes, each time zooming in on one important present-day issue. Students will have the opportunity to explore topics that have been making the national and international headlines by engaging with the oftentimes complex historical developments that led to the current situation. They will leave the course with a better understanding of both the past and the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1040 - THE GREAT WAR: A CULTURAL HISTORY

Minimum Credits: 3
Maximum Credits: 3
The Great War shaped 20th century Europe and the world. So, in section 1 of this class, you will engage with the how and why the war began and the lively debate taking place in Europe today over the origins of the war. In section 2 you will analyze the war itself and the West's 'descent into barbarism.' In section 3 you will analyze the impact of the war on the arts, revolution and women's roles in society. Finally, in section 4, you will analyze how Europeans dealt with memory and mourning after the war as well as how they 'constructed memory' of the war.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1044 - TWO CENTURIES OF DEMOCRATIZATION

Minimum Credits: 3
Maximum Credits: 3
Democratization has advanced in modern history in several great multicontinental bursts from the late eighteenth century to the present. This course will explore why certain historical eras are such moments of democratization and how the very conception of democracy has developed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1045 - SOCIALISM VERSUS CAPITALISM

Minimum Credits: 3
Maximum Credits: 3
The course covers the economic changes that produced capitalism; the attempts to understand capitalism which culminated in the theories of Adam Smith; the problems of communist societies and their attempts to return to some form of capitalism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

HIST 1046 - NATIONALISM

Minimum Credits: 3
Maximum Credits: 3
Theories of nationalism, ethnicity, and race are examined and are contrasted with theories of modernization and socialism. Particular emphasis is placed on ethnonationalism in developed Western countries, such as Britain, France, Spain, Belgium, and Canada, and on ethnic politics in the U.S. Comparisons are drawn with nationalism in other types of political systems, particularly the USSR, Yugoslavia, and selected Middle East and African countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1047 - COMMUNISM: FROM MARXIST THOUGHT TO "REALLY EXISTING SOCIALISM"

Minimum Credits: 3
Maximum Credits: 3
This course introduces the history of communism from Marxist thought in the 1840s to the collapse of the Soviet-style socialist regimes in eastern Europe in the 1990s. It will cover the major turning points in the history of communism: the revolutions of 1848; the split of Europe's socialist movement in a revolutionary and an evolutionary wing; the Russian Revolution of 1917 and the establishment of the Soviet Union; the shift from Leninism to Stalinism in the 1920s; the implementation of Soviet-style regimes throughout eastern Europe after the Second World War; their economic accomplishments in the 1950s and 1960s; their eventual failure to meet the economic expectations of their citizens, which fueled the protest movements in some socialist countries, before the political developments in communist Poland in the 1980s caused a chain reaction that led to a collapse of the communist regimes throughout eastern Europe between 1989 and 1991; and significant economic changes in China.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1048 - THE HOLOCAUST IN CONTEXT

Minimum Credits: 3
Maximum Credits: 3
"Ethnic cleansing" and "genocide" are neither twentieth-century phenomena, nor is their occurrence linked to any particular region in the world. However, during the two world wars and their aftermath acts the civilian population of Central and Eastern Europe experienced a degree of mass violence that not only changed to face of the region but also led to the establishment of the very term "genocide". The Holocaust stands out as the most comprehensive, most radically executed case of genocide in modern times. Yet it was embedded in a wider context of systematic violence against various populations in Central and Eastern Europe. Rather than beginning with a general, abstract reflection on the reasons for the various forms of mass violence from ethnic cleansing to genocide, this course allows students to explore the specific social, cultural, and political conditions under which the sometimes entangled cases of mass violence against civilians occurred in twentieth-century Central and Eastern Europe. The course concludes with a general reflection and discussion of the concept of "genocide", the limits of its analytical usefulness, and the political baggage it carries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1049 - AFTER HITLER: RETRIBUTION, RECONSTRUCTION, AND RECONCILIATION: POSTWAR EUROPE

Minimum Credits: 3
Maximum Credits: 3
Europe experienced unprecedented levels of destruction and violence during the Second World War. The experience of ethnic cleansing and mass murder, with the Holocaust standing out as the most disturbing case of mass murder in modern times, were so traumatic that many people lost their faith in modern civilization as such. Against this backdrop, would have predicted that Europe would not only recover but also reach an unprecedented level of political stability, prosperity, and civility after the Second World War. This course examines the striking transformation of postwar Europe by exploring the strategies European societies - with significant involvement of the United States - pursued to overcome the traumas of war and rebuild a shattered continent. Course topics include the legal persecution of war crimes, the building of societies and political orders that are based on the respect of human rights and the rule of law, the reconstruction of Europe's bombed cities, and the attempts to overcome nationalism and xenophobia through various forms of European integration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1050 - INTELLECTUALS AND POLITICS IN 2OTHC EUROPE

Minimum Credits: 3
Maximum Credits: 3
Intellectuals have been involved with politics whether they have wished or not throughout this turbulent century. In this seminar we will grapple with different social theories about modern intellectuals, their political and ethnical responsibility, and their production. We will also consider ways of doing intellectual history and practice doing intellectual history in written assignments. We will also do case studies, examining the role of intellectuals in several settings during periods of political crises and conflict such as revolution, Nazism, communism, the Cold War.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, West European Studies

HIST 1051 - CATHOLICISM IN THE NEW WORLD

Minimum Credits: 3
Maximum Credits: 3
The course will examine the history of the Roman Catholic Church since 1492 in the Americas using various moments of internal crisis or external conflict as focal points for study. Topics will include: missionary and military contact with new world indigenous populations after 1492; the minority situation of Catholics in the new United States; the Irish famine and its consequences; conflicts between Catholic ethnics; the impact of Catholic support for fascist regimes in the 1930s and 1940s; counter-cultural forms of Catholicism (conscientious objectors, civil rights activists, pacifists); Vatican ii and its impact; liberation theology, Marxism and structural reform in Latin America; shifting theological positions on social and moral issues; the current sexual abuse crisis. While the emphasis will rest upon the social, economic, and political dimensions of Catholic history, the course will also address the aesthetic and cultural legacy of Catholicism including sacred architecture, music, and the arts, in elite and vernacular forms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1055 - HISTORY OF DANCE

Minimum Credits: 3
Maximum Credits: 3
Does dancing have a history? This course investigates the most popular and controversial dances from the 16th-20th centuries, from the Volta to the Waltz to the Tango to the Grind. We will explore how a dance's initial reception and subsequent development reveal assumptions about class, race, gender, youth culture, sexuality, and the body. The course will focus on social dancing in Europe and North America, but we will also discuss parallel developments in theatrical dance and the significant influence of African dance traditions on Western dance. Assignments will include video clips as well as readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1056 - HISTORY OF DANCE PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course gives a "hands on" introduction to the dances of the past 400 years, from the stately Pavane of Shakespeare's day to 20th-century tango, swing, and hip hop. Instruction manuals enable us to reconstruct the early dances with some degree of accuracy, while film and video have preserved more recent forms. In addition to learning how to do these dances, we will also consider how choreographies and dance floor etiquette reflected and challenged gender expectations, class divisions, and race relations. No prior dance experience is needed, but students are expected to participate fully in all class exercises and activities.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

HIST 1058 - GLOBAL HISTORY OF DANCE

Minimum Credits: 3
Maximum Credits: 3
We find dancing in every world culture and throughout history, but the dances of each place and time are specific, distinctive, and ever changing. Thus, dance is both an excellent and a problematic subject for cultural and historical comparisons. This course investigates the types, uses, and understandings of dance across the globe and examines shifting attitudes and practices from the renaissance to today. Themes addressed will include dance as a spiritual practice, a tool of the state, and an expression of personal identity. Participatory workshops and video viewing assignments will supplement lectures and readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1060 - THE GLOBAL HISTORY OF PIRACY

Minimum Credits: 3
Maximum Credits: 3
This is an exploration of the ancient and global history of piracy. Using primary historical documents (written by and about pirates) as well as the accounts of modern historians, we will discuss a range of topics such as the role of piracy in the building of empires, the later struggle of merchants and their allies to eradicate piracy through bloody campaigns of capital punishment, and the meanings of the pirate as represented in popular culture through the ages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1062 - HUMAN RIGHTS IN WORLD HISTORY

Minimum Credits: 3
Maximum Credits: 3
Human rights in world history, will provide a historical overview of the human rights movement, focusing on the 18th-20th centuries. The course will lay out the parameters of the struggle to define and implement human rights in the Western and non-Western world, and engage with the different resulting viewpoints. The course will explore controversial aspects of the implementation of human rights internationally, including calls for the respect of cultural differences. Finally, the course will examine case studies of the racial/ethnic/caste dimension of the human rights struggle, looking at the US, Brazil, Israel, and India as countries with quite different cultural traditions, political makeups, and demographic compositions. The course will enroll 40 students, and will meet once per week in the evening.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1076 - COMPARATIVE SLAVERY

Minimum Credits: 3
Maximum Credits: 3
This course will compare slave societies and slave systems in the old world (Europe and Africa) with the new world (U.S. And Latin America).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1080 - EMPIRES AND THE ENVIRONMENT IN WORLD HISTORY

Minimum Credits: 3
Maximum Credits: 3
This upper level seminar examines how global commodity trades in natural resources have shaped the world. We will consider how the pursuit of natural wealth has led people to alter the world around them, and what the consequences of those alterations have been for natural and human communities. We will consider places and practices as wide-ranging as silver production in colonial south America, sugar in the 18th Century Caribbean, opium in 19th Century China, and petroleum in the modern-day Middle East. We will examine global themes such as imperialism, colonialism, capitalism, and the spread of epidemic diseases.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1082 - WOMEN, GENDER AND SPORT

Minimum Credits: 3
Maximum Credits: 3

Serena Williams, Megan Rapinoe, Brittney Griner, Gabrielle Reese, and Aly Raisman each hold a unique place in American culture and elicit a different set of responses. This course seeks to unpack the history of female athleticism and understand the forces that surround access and participation. Societal changes have expanded female opportunities, but have those been experienced by all sectors? What barriers did and do women face? This course will analyze the relationship between gender and sport from multiple perspectives, focusing on economic, cultural, political, social, legal and educational influences. We will consider the evolving roles for women in sport, noting that beliefs regarding female bodies, gender equity, gender identity, health, and women's role in society have shaped the narrative. Topics will include the history of female athletes, structural constraints, race and ethnicity, class, sexuality and homophobia, the role of the media, and finally, the impact of Title IX.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1083 - HISTORY OF SPORTS

Minimum Credits: 3
Maximum Credits: 3
The course will survey the history of sports, focusing primarily on the 20th century. We will balance consideration of professional sports with that of the games the people play. We will look both at the impact of television as well as the new fitness (revolution). Topics considered will include women in sports, the commercialization of culture and collegiate sports. A major focus will be the role in sports in Pittsburgh in the past 50 years.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Latin American Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1084 - FOOD AND HISTORY

Minimum Credits: 3
Maximum Credits: 3
The subject of food production, preparation, and consumption is examined from a variety of disciplinary perspectives in this reading seminar. The course contrasts pre-industrial and modern diets and food systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1090 - HISTORY OF MEDICINE AND HEALTH CARE

Minimum Credits: 3
Maximum Credits: 3
Provides an overview of the social history of medicine from prehistory to the present. Focuses on the emergence of medical institutions, education, theories, practices and the Orthodox and irregular medical sects. Describes the growth of the separate health disciplines of nursing, pharmacy and public health. Examines the impact of socioeconomic factors, religions and war on the evolution of medical science. Discusses the changing roles of government in the development of the American health care system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1091 - GLOBAL HEALTH HISTORY: HISTORICAL PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
This course explores the history of global public health from 1850-present. It focuses on the social, political, economic, environmental, and cultural factors that have influenced the development of global health generally and also shaped specific interventions and policies. What are the political and economic roots of health disparities? Why do interventions succeed or fail and what are their long-term consequences? What can we learn from studying the continuities and disparities between modern global health policies and past programs? Historical analysis of theory and practice provides crucial perspective on the field.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1095 - SPORT AND GLOBAL CAPITALISM

Minimum Credits: 3
Maximum Credits: 3
The history of sport and global capitalism is designed for students seeking to make their way as professionals and/or for those interested in global sport as a social and political force both in the US and around the world. Focusing on the evolution of sport as a global industry and the creation of an imposing scholastic, community, and non-profit infrastructure, it equips students to understand and navigate those arenas. If, after graduation, students venture into the sports industry, scholastic sport, or sport for development, they should do so with their eyes wide open.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1102 - UNITING EUROPE. THE HISTORY OF THE EUROPEAN UNION

Minimum Credits: 3
Maximum Credits: 3
This course deals with European integration, from the first attempts to create supranational structures after WWI to the creation of a European constitution and the eastward enlargement of the European Union in 2004. In addition to providing students with an overview of the history of the European integration and of the institutions of the European Union today, this course focuses on the various ideas and concepts under lying the integration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, West European Studies

HIST 1108 - COMPARATIVE EUROPEAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
This non-honors course compares two European states in the Twentieth Century. The focus is on social history.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1109 - FRANCE, SPAIN AND ITALY IN THE 20TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
This course will compare three European countries, as a way of identifying the distinctive traits in each. We shall also hypothesize as to which of these traits are most likely to survive, and which even to thrive, in the Europe of the future. Although there are no prerequisites, students who can read a foreign language relevant to one of the three countries are particularly welcome.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1110 - MEDIEVAL HISTORY 1

Minimum Credits: 3
Maximum Credits: 3
Survey course in the social, political, economic and religious history of Europe from the Diocletian reforms to the year one thousand. Special attention to interpreting the primary documents and to integrating various areas of activity (e.g. economic and religious). Focus on France, England, Germany, and Italy.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1111 - MEDIEVAL HISTORY 2

Minimum Credits: 3
Maximum Credits: 3
Survey course in the social, political, economic and religious history of Europe from the year 1000 to the Black Death. Special attention to interpreting the primary documents and to integrating various areas of activity (e.g. economic and religious). Focus on France, England, Germany, and Italy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1114 - MEDIEVAL SPAIN

Minimum Credits: 3
Maximum Credits: 3
The course Medieval Iberia stresses the conflicts and encounters between Christians, Muslims, and Jews. Through the analysis of a wide variety of selected and translated primary sources as well as modern historiography, the course presents the main entities and processes evolving in Iberia from 711 to 1492. The major cultural entities approached are: Al-Andalus, Hispania, and Sefarad. The main processes are: the consolidation of states, the unfolding of military campaigns, the development of cultural interactions, and the transformations of the economic and social life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1115 - THE WEST AND THE WORLD

Minimum Credits: 3
Maximum Credits: 3
From the time of Columbus to that of William Pitt, Europe developed its knowledge and power in a way that enabled it progressively to dominate the world. Around the globe, Europeans reshaped, or destroyed, or failed to affect, the peoples whom they "discovered". This course attempts to explain Europe's rise to dominance, by comparing the West to the societies of Islamand of East Asia. It also explores the various kinds of cultural contact between Europeans, and Africans, Asians, and Amer-Indians, from the 15th to the 18th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: African Studies, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies, Writing Requirement Course

HIST 1116 - INTRODUCTION TO THE RENAISSANCE

Minimum Credits: 3
Maximum Credits: 3
The idea of the Renaissance is central to Western culture. Many of our values and tastes devolve from--or consciously react against--patterns that were established or reinterpreted five hundred years ago. The student who explores the renaissance, therefore, gains hold of one of the keys of Western civilization. He or she also acquires practice in critical reading, discussion, and the written expression of ideas.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*

Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies, Writing Requirement Course

HIST 1121 - TUDOR ENGLAND

Minimum Credits: 3
Maximum Credits: 3
The Tudor period - the age of Henry VIII and Elizabeth I is generally looked upon as a Golden Age of English culture. It was also a period of considerable social and political change when, under the impact of the Renaissance and reformation, as well as an economic revolution, the traditional medieval world gave way to one which was recognizably modern. Shakespeare's Hamlet, Bacon's advancement of learning all emerge from this culture. This was also the century during which London came to control the destinies of Wales, Scotland and Ireland.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1123 - MODERN BRITAIN

Minimum Credits: 3
Maximum Credits: 3
Political, economic and social change in Britain from the early 18th century to the present are examined in depth. Topics include the pre-industrial social structure, the origins of political stability, the making of the Industrial Revolution, popular protest and political reform, Britain's supremacy during the Victorian era, imperialism and the rise of labor, the impact of total war, and the emergence of the welfare state. A discussion of Britain's future prospects concludes the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1124 - NORTHERN IRELAND: THE TROUBLES - 1969-1994

Minimum Credits: 3
Maximum Credits: 3
Ex-republicans and loyalists: "you've been in Belfast for 2 weeks. Do you understand the conflict any better now?" Pitt students: "no. We are more confused now than when we arrived." Ex-prisoners: "good! You've learned something." Contradictory? Confusing? Confusing? All of the above? If you say, ""all of the above" then you will find this class "intriguing." You will move beyond the "inherited histories" concerning the conflict in Ireland and investigate the roots of the Irish conflict. By the end, you will come to realize that history is rarely black and white and that there are many "truths" and shades of grey.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1126 - FRENCH REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course will consider various theories of the social sources of revolutions and evaluate them in the light of historical research.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1128 - MODERN FRANCE-1 1780-1880

Minimum Credits: 3
Maximum Credits: 3
A history of France between the fall of the old regime and the foundation of the third republic.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1131 - THE RISE OF THE GERMAN EMPIRE

Minimum Credits: 3
Maximum Credits: 3
A lecture course on German history from the foundation of the North German federation to the end of World War II. While the structure of the course is shaped by the main political changes, considerable attention is given to the evolution of society, and to cultural and intellectual life as well.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1132 - GERMANY IN THE COLD WAR

Minimum Credits: 3
Maximum Credits: 3
This course examines the history of Germany from World War I to the present by studying German history in its international context. Students will learn to distinguish between political, social, economic and cultural trends that were specific to Germany from those that were common throughout Europe and beyond. Topics include WWI's impact on European societies, the economic and political crisis of the interwar years and the explosion of creativity, the establishment of the Nazi State, WWII as turning point of European and global history, Germany's Cold War division and the unexpected reunification of 1990, as well as European integration as the game-changing innovation of the postwar years.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1134 - IRELAND'S LOYAL REBELS: THE PROTESTANTS OF ULSTER

Minimum Credits: 3
Maximum Credits: 3
This course will examine both Irish and Northern Irish history by focusing on the contested and contrary role of Protestants in Ireland and Northern Ireland in their relationship to the Crown. The course will analyze the roots of Protestant rebellions in Ireland and how they related to the concept of "conditional loyalty", i.e. that some stayed loyal to the Crown, as long as they believed the Crown would meet their expectations. Using case studies of the English Civil War, the Glorious Revolution, the 1798 United Irishmen Rebellion, and a variety of others, students will scrutinize the concept of loyalty in depth. Doing so provides a very different view of Irish history than the one of popular memory, film, music and literature. Students with study the development of Irish Protestantism and its unique nature within the context of the historical periods as well as the consequences for Irish and Northern Irish history today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: HIST 0150 or 1124 or Instructor Permission
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement

HIST 1135 - BERLIN: HISTORY OF A EUROPEAN METROPOLIS

Minimum Credits: 3
Maximum Credits: 3
Berlin is not just the capital of Germany. It is a city that is shaped more than any other place in Germany by this nation's dramatic past during the 19th and 20th century. All the ups and downs of Germany's modern history have left their traces especially in Berlin. This course looks at the German past from the 19th century to the present by using Berlin as an exemplary place. Besides giving an overview of the history of Germany in general and Berlin in particular, this course investigates to what degree the history of a place can be read through its visual appearance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1138 - FULBRIGHT SEMINAR IN ITALIAN STUDIES

Minimum Credits: 3
Maximum Credits: 3
The Fulbright seminar in Italian studies is the spring-term undergraduate-level course offered by the visiting Fulbright distinguished scholar from Italy. This course is typically offered in the fields of art history, cultural studies, film, history, literature, museum studies, political science, or urban studies.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

HIST 1141 - SPAIN AND PORTUGAL IN THE 20TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
In 1898 Spain lost its empire during the Spanish-American War. Portugal, instead, preserved its empire for most of the 20th century. This divergence resulted in different developments such as a Civil War in Spain (1936-1939) and a political revolution in Portugal (1974). However, both countries also shared similar experiences: long-lasting authoritarian regimes, democratic transitions, and incorporation into the European community. The course tackles the singularities, commonalities, and connections, and places them in global context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1144 - THE PORTUGUESE EMPIRE AND EARLY MODERN GLOBALALIZATION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the study of the Portuguese overseas empire in the early modern period by adopting a non-conventional perspective. In addition to offering a chronological and geographical framework of Portuguese expansion, the course will focus on the political, social and cultural interactions that emerged from the permanent contact of Europeans with non-European societies in Africa, Asia and the Americas. The course considers Portuguese overseas expansion within the broader context of the early modern world and investigates notions of globalization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1145 - INTELLECTUAL FOUNDATIONS OF CAPITALISM

Minimum Credits: 3
Maximum Credits: 3
This course explores the salient features of European economic development from the black plague of the Middle Ages to the Great Depression of the 1930's. The emphasis will be to understand how social, demographic, and economic processes interacted and ultimately culminated in one of the most momentous events in the history of mankind, the Industrial Revolution. We shall venture an explanation for why Europe was the first continent and England the first country to industrialize. The social changes in the aftermath of the Revolution will also be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1153 - EUROPEAN INTELLECTUAL HISTORY 2 1870-1940

Minimum Credits: 3
Maximum Credits: 3
A course of readings and discussions focused on major texts in the European intellectual tradition from the age of positivism to World War II. There will be occasional lectures, especially on the social and institutional contexts, but the predominant emphasis will be on class discussions of primary readings.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1157 - HISTORY OF MAPS AND SPATIAL REPRESENTATION

Minimum Credits: 3
Maximum Credits: 3
It has been famously been observed that "the map is not the territory." Any useful map must omit a great deal of information about the territory it represents, and must generalize information about the real world into a small number of highly schematized categories. All maps are based on particular technological affordances, executed within a certain cultural, political and historical context. Humans think visually about space, and almost every society, past and present, has developed some form of map making. However, the appearance of maps, the information that they include, and the purposes to which they have been put have all varied dramatically. Moreover, people often reject maps altogether in favor of travel guides, gazetteers and itineraries. Once written on paper, these now take the form of apps in our cars and on our phones. In spite of their diversity, all spatial representations encode some imagination about the world. All of them reinforce it on behalf of some group of people, and frequently at the expense of some others. This course explores how people have depicted the world, and with what consequences, from the stone carvings of the Neolithic era to the global positioning systems of today. In this course, students will create paper and digital maps, write papers, make presentations and engage in discussion in order to: 1) Reveal that representation of the world and its constituent places is historically and culturally specific. 2) Demonstrate how every mode of spatial representation reinforces particular social interests. 3) Detail how particular maps and changes in cartographic techniques have changed history. 4) Describe transformations in cartography and the way that they result from new technologies, politics, and ideologies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1164 - SMALL COUNTRIES AND THE EUROPEAN UNION

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the modern history of three representative small countries of the European Union--Denmark, Latvia and Greece'and upon their relationships with larger countries of the EU, and with the European Union as a whole. We will look at the long process, beginning in the 19th century, which brought each country to its present state, and at each one's current condition and problems as a member of the EU. We will use this knowledge to generalize the experience of all the 21 small countries of the EU, and to critique current models of governance and power in the European Union.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1165 - IMMIGRATION AND THE TRANSFORMATION OF WESTERN EUROPE, 1945-2005

Minimum Credits: 3
Maximum Credits: 3
Since the Second World War, an intense and diverse immigration has changed the face of every West European nation migrants may have come from the far corners of their own nations as well as from former colonies, and other continents. Our course will offer a coherent if necessarily selective history of Western Europe since 1945. We will focus on, and compare, Italy, France, the Netherlands, and Britain, issues include: the Islamic diaspora; the rise of nativism; the third generation of immigrants; and the future of the European Union.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies, Writing Requirement Course

HIST 1169 - APPROACHES TO ANTISEMITISM

Minimum Credits: 3
Maximum Credits: 3
We survey historical, sociological, psychological, religious and political approaches to expressions of antisemitism as we study scholarly treatment of the phenomenon in the 20th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1173 - HISTORY AND MEMORY IN THE JEWISH TRADITION

Minimum Credits: 3
Maximum Credits: 3
Students will be introduced to the manner in which historians have studied and understood the Jewish experience from antiquity through the modern age. The role of historical study in the formation of Jewish identity will be especially highlighted.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1175 - XENOPHOBIA IN MODERN EUROPE

Minimum Credits: 3
Maximum Credits: 3
This course will examine Europe's post-war xenophobic, racist and exclusionary policies. We will use memoirs, photo-journalism, film and interviews to understand recent discrimination against refugees, guest workers, Jews, linguistic and religious minorities. We will also put the question into scholarly context, as we examine how historians, sociologists, psychologists and anthropologists try to understand the way in which Europeans construct the categories of "us" and the "others".
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1180 - 19TH CENTURY BRITAIN

Minimum Credits: 3
Maximum Credits: 3
Political, economic and social change in Britain from the early 18th century to the present are examined in depth. Topics include the pre-industrial social structure, the origins of political stability, the making of the Industrial Revolution, popular protest and political reform, Britain's supremacy during the Victorian Era, imperialism and the rise of labor, the impact of total war, and the emergence of the welfare state. A discussion of Britain's future prospects concludes the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1181 - TWENTIETH CENTURY BRITAIN

Minimum Credits: 3
Maximum Credits: 3
Political, economic and social change in Britain from the early 18th century to the present are examined in depth. Topics include the pre-industrial social structure, the origins of political stability, the making of the Industrial Revolution, popular protest and political reform, Britain's supremacy during the Victorian Era, imperialism and the rise of labor, the impact of total war, and the emergence of the welfare state. A discussion of Britain's future prospects concludes the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1190 - MEDIEVAL GOVERNMENT AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course deals with the emergence of the medieval state and its institutions, for example, systems of law (Roman, canon, and common law) and representative institutions. The course also focuses on certain aspects of intellectual life (for example, theories of kingship and constitutionalism) and forms of social, political, and economic organization (for example, feudalism and manorialism).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1191 - ENGLISH ORIGINS OF AMERICAN LAW

Minimum Credits: 3
Maximum Credits: 3
This course examines the origins and development of English law with a view toward understanding the foundations of the American legal system. Keeping in mind that law is shaped by social, economic, and political considerations, we attempt to answer the question, "how did medieval and early modern English society solve certain problems with which all societies must eventually cope?"
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1197 - BLACK DEATH: PLAGUE AND HISTORY

Minimum Credits: 3
Maximum Credits: 3
The Black Death, the great epidemic of 1347-1350's was the most profound epidemiological-ecological crisis Europe had ever experienced. Between 30 and 70% of the population of the western world vanished. In the wake of this demographic disaster economic, psychological, social, literary and even artistic processes were profoundly altered. This epidemic can be traced through extensive primary sources ranging from literature to art history - from population statistics through village desertions. This course will introduce these data and examine the consequences of the Black Death.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1220 - BETWEEN EMPIRES: POLISH HISTORY THROUGH FILM

Minimum Credits: 3
Maximum Credits: 3
This course covers the period from Poland's final partition (1795) until the present day. The themes for the 1795-1914 era will be nationalism, economic growth and shifting cultural developments. The interwar period will stress the assaults on the attempt to foster economic growth and a democratic government. The last section deals with the impact of World War II and the relationship between the post-war communist system and the Polish society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1225 - BALKAN HISTORY FROM THE OTTOMANS TO THE YUGOSLAV COLLAPSE

Minimum Credits: 3
Maximum Credits: 3
This course examines the history of the Balkan peninsula (Greece, Bulgaria, Romania, Albania, and the countries of the former Yugoslavia) and its peoples from the Ottoman Empire through to the collapse of Yugoslavia in the 1990s. It places particular stress on the dynamic experience of daily life against a background of regularly shifting political ideologies through the prisms of class, gender, and health. Additionally, it analyzes the conceptualization of what is meant by the term 'Balkans' as discussed by historians, philosophers, journalists, and writers.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1226 - EASTERN EUROPEAN COMMUNISM AT THE MOVIES

Minimum Credits: 3
Maximum Credits: 3
After the 1917 revolution in Russia, Lenin famously said: "to us film is the most important of all the arts." Communists were to use cinema for propaganda purposes, in order to carry out massive state-wide campaigns aiming to bring radical social change. However, Soviet avant-garde filmmakers were also concerned with revolutionizing filmmaking itself. Some three decades after Lenin's remarks, the leaders of the countries of Eastern Europe which had become "Soviet satellites" after World War II, attempted to use censorship and control over the arts and cinema to produce effective propaganda for their own political campaigns. Writers, artists, and filmmakers were coveted allies of these new communist regimes that came to power in the 1940s. Again, however, filmmakers and actors did not always toe the Party line. Some were able to use film to craft complex works with subtle messages portraying aspects of daily life as it was experienced by ordinary people under the new regimes. Films that we will watch and analyze, released in Hungary, Romania, Yugoslavia, Poland, and Czechoslovakia in the decades before the fall of communism in 1989 managed to depict, evoke, and criticize "really existing communism." This course will trace the history of East European communism and of East European film-making from 1944 to 1990, acquainting students with examples from an exceptional body of cinematographic work together with the broad outlines of East European history. Students will learn to "read" films from 20th century Eastern Europe in their cultural, political, and historical context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1270 - MODERN EASTERN EUROPEAN JEWRY

Minimum Credits: 3
Maximum Credits: 3
This upper level undergraduate course surveys the history of the historically most numerous portion of European Jewry from the medieval period to the present, emphasizing the modernization of east-central European Jews as minorities in the context of their host societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1313 - HISTORY OF RUSSIAN REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course examines the origins, contours, and dynamics of the Russian Revolution of 1917, as well, as the period 1918-1921 during which the new Soviet State fought for its survival.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1315 - STALIN

Minimum Credits: 3
Maximum Credits: 3
This course examines the USSR during Stalin's reign, 1929-53. Each facet of his reign--industrial development, collectivization, class war, and repression--receive detailed attention as does WWII and the Cold War.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1326 - RUSSIA AND THE WORLD

Minimum Credits: 3
Maximum Credits: 3
This course addresses itself to the following question: why societies outside the American and West European sphere find it difficult, impossible and/or undesirable to adopt (or adapt) the liberal-democratic-individualistic socio-political system (China, Iran, etc.), which Western opinion deems optimal?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1344 - RUSSIAN REVOLUTION MOVEMENTS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to examine the two major revolutionary movements of the second half of the 19th century in Russia: populism and Marxism. Readings include secondary and primary sources. The objective is to train students to analyze and evaluate different sorts of historical evidence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1385 - EUROPE SINCE 1945

Minimum Credits: 3
Maximum Credits: 3
History of Western and Eastern Europe: the Postwar reconstruction, communism in Eastern Europe; Europe in the Cold War; economic, social and cultural changes; the Revolutions of 1989.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1420 - ANCIENT CHINA

Minimum Credits: 3
Maximum Credits: 3
Comprehensive survey on development of ancient civilization in china from pre-historic time to the unification of China into an Empire. Archaeological evidence and literary materials are both sources of information. The main themes include urbanization, feudalism, evolution of state, social changes, and development of various schools of thought.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1422 - LATE IMPERIAL CHINA

Minimum Credits: 3
Maximum Credits: 3
From the sixteenth century, China was gradually drawn into the global economy. The effect of this economic change on China's traditional polity, culture, and society, 1550 to 1800, will be studied through lectures and classroom discussions of assigned readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1423 - MODERN CHINA

Minimum Credits: 3
Maximum Credits: 3
China's abandonment of its traditional political culture and its emergence in the Twentieth Century as a modern nation-state ruled by the Chinese communist party is the primary theme of this course, which will include lectures, readings, films, and classroom discussion.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1425 - HISTORY OF MEDICINE IN CHINA

Minimum Credits: 3
Maximum Credits: 3
This course examines the history of medicine in China in two parts. The first part examines the development of concepts and practices of health and medicine up to the mid-nineteenth century. The second part examines how the introduction of Western medicine changed the healthcare field, forced reforms, and created a dual system of institutionalized tcm and biomedicine.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1433 - MODERN JAPAN

Minimum Credits: 3
Maximum Credits: 3
The history of Japan since 1800. This course stresses the modernization and economic development of Japan into the industrial giant it has become today. It also investigates the major by-product of that development, World War II, and the events that led to the war.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1434 - TEA, MONSTERS, MANGA, AND ANIME: A CULTURAL HISTORY OF JAPAN

Minimum Credits: 3
Maximum Credits: 3
Through a survey of aesthetic practices ranging from the tea ceremony to surrealism, manga, and anime, this seminar introduces students to the ways in which Japanese society changed socially, politically, and culturally from the sixteenth century to today. Throughout these changes, multiple ideologies from liberalism to fascism, Marxism jostled against each other and multiple social movements from colonialism to nationalism, women's rights, and environmentalism shaped Japanese society. These social transformations were based not only on rational calculation but on attractions towards particular ways of life, attractions which we can study using the concept of aesthetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1437 - THE WORLD OF THE SWORD: EXPLORING THE SAMURAI

Minimum Credits: 3
Maximum Credits: 3
Samurai is a Japanese word that has entered the English language. It emblazons everything from car models to china patterns. The very popularity of the concept of the warrior lifestyle has obscured its meaning. Through directed reading and writing the students will undertake an in-depth examination of the social, political, and economic world in which the samurai lived as a lens to understanding Japanese culture and Western perceptions of it.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

HIST 1446 - EAST ASIAN POLITICAL ECONOMY, 1950-PRESENT

Minimum Credits: 3
Maximum Credits: 3
This upper-level course compares the political, economic, and social development of East Asian societies over the past three generations, with a focus on Japan, South Korea, and greater China. It focuses on the political circumstances that have taken each country down the path it has taken, and how these paths now shape the future prospects of each country as well as of East Asia as a region. The first half of the course will focus on country-specific historical studies, tracing the development path each country has taken in the post-war period. Some common themes repeat themselves in each of the country case studies: the role of the state, the interaction between domestic and international factors, the relationship between bureaucrats and politicians, and the development of various institutions. Other topics and readings highlight national specificities, revealing unique circumstances that differentiate the experiences of one country form another. The second half of the course will focus on common themes and contemporary challenges shared by countries in East Asia including, but not limited to, rapidly aging populations, industrialization and green technology, competition for energy sources and commodities, and food security.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1470 - EURASIAN CURRENTS/ SILK ROADS OF THE COMMON ERA

Minimum Credits: 3
Maximum Credits: 3
This course investigates the transmission and adaptation of three categories of human culture (material technology, ideas, and images) across the great landmass of Eurasia from approximately 3,000 BC to the present century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1471 - WATER IN CENTRAL EURASIA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce undergraduate students to debates around the very constitution of "Central Eurasia" as a set of topographical markers (the Aral Sea Basin); as a set of five post-Soviet nation-states; as a larger geographic expanse that stretches from southern Russia to northern China); as a distinct site of recurrent environmental challenges (desertification, cotton production, irrigation); and as a cultural field of nomad and settler cultures. Relying on an interdisciplinary selection of key texts, the course lays the groundwork for a later, more in-depth examination of two core assertions for the region: 1) water is power; and 2) water management determines, for better or worse, human mobility, epidemics, geopolitical rivalries and peaceful exchange, whether commercial, cultural, or technological.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1475 - EAST ASIAN BUDDHISM

Minimum Credits: 3
Maximum Credits: 3
The transmission of Buddhism to East Asia was a momentous development in the history of world cultures and religions. Not only did it precipitate major changes in the cultures of China, Korea and Japan, it also was attended by transformations within Buddhism itself. Beginning with an introduction to the basic concepts of Buddhism, this course examines the major doctrinal, meditative, devotional, and institutional traditions and themes within Chinese and Japanese Buddhism in historical perspective. Particular attention is paid to the problems of transmission of thought and practices from one culture to another and to the ways in which Buddhism changed to meet those challenges and make itself relevant to the members of East Asian societies. We strive to develop an awareness of how Chinese and Japanese Buddhism interacted with and helped to shape East Asian history as well as to cultivate sensitivity to and appreciation of East Asian Buddhism as a contribution to our understanding of the human experience

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1476 - RELIGION AND HEALING IN CHINA

Minimum Credits: 3
Maximum Credits: 3
This course examines the major traditions and themes that constitute religion in China. The origins and development of Confucianism, Daoism, Buddhism, popular and family religion, and religion and the state are presented within an overall historical framework. As China becomes more and more central to the world's modern commodity culture, some have predicted a decline in traditional religious values and practices. In fact, the reverse is true: from Taiwan and Hong Kong through mainland China, increasing prosperity is resulting in an increased "investment" in religion. In addition to the study of religious ideas, practices, and institutions in premodern China, the course ends by looking at contemporary beliefs and practices and issues of politics, class, and gender. Our purpose is to gain some exposure to Chinese religious thought and practice, to identify dominant themes underlying Chinese values and behavior, and to explore the syncretic nature of religion in China as each tradition finds expression in and comes to influence other aspects of Chinese religion and culture. In this way, we hope to come to understand the critical role played by the various traditions in the unfolding of Chinese history and in the formation of the Chinese view of the world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1477 - RELIGION IN JAPAN

Minimum Credits: 3
Maximum Credits: 3
This course provides an historical overview of religion in Japan from the 3rd century BCE up to the present. It introduces many of the fascinating events, texts, doctrines, institutions, personalities, and practices in the history of religion in Japan. It also examines issues related to myth, shamanism, ritual, art, and politics. During the course, questions such as the following are addressed: How did religious institutions both condemn and condone violence? What are the different paths to enlightenment in Japanese Buddhism? What made a person "holy"? Why did the government make people step on pictures of Jesus?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1480 - CHINESE THOUGHT

Minimum Credits: 3
Maximum Credits: 3
Designed for honors college students to discern and to appreciate the Chinese way of thinking by reading English translations of text by relevant thinkers. Class discussion will be to compare and contrast Chinese thinking with that of America today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1482 - BUDDHISM ALONG THE SILK ROAD

Minimum Credits: 3
Maximum Credits: 3
This class serves as an introduction to Buddhism from its origins through the seventh century CE as it moved along the Silk Road, the ancient EurAsian trading network that is considered one of the earliest and most important super highways of trade and culture. Concomitantly, it serves as an introduction to the silk road as the scenario for contact and exchange. The emphasis is on religious praxis, the actors and places that transformed Buddhism and were transformed by it. We will examine archaeological remains and art and discuss how they complement or sometimes contradict textually-based historical narratives. Through the examination of four case studies we will discuss questions related to religious interaction as embodied in material culture and analyze it in context.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1484 - DEATH AND BEYOND IN BUDDHIST CULTURES

Minimum Credits: 3
Maximum Credits: 3
Death and beyond in Buddhist cultures mortality is the human condition. This seminar focuses on the philosophical discourse, beliefs and practices relating to death, dying and the afterlife in Buddhist cultures, both traditionally and in modern times. We explore Buddhist cosmology, karmic causality, death tales, postmortem journeys, ancestor rites, mortuary practices and ghost placation. Through primary texts in translation, secondary scholarship, discussion and film, we see how dealing with death tells us as much about life as it does about what lies beyond.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIST 1510 - VIOLENCE & HUMAN RIGHTS IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course provides a critical perspective on human rights struggles in Modern Latin America. Our primary focus is the 1960s, 1970s, and 1980s, when Latin America suffered the rule of extraordinarily violent military dictatorships that waged a 'dirty war' against the civilian population. The course considers the origins of these authoritarian governments, their forms of rule, and use of violence. It also explores resistance to the massive violation of human rights; the eventual downfall of the dictatorships; and the types of justice, truth-telling, and commemoration that characterized the turn to democratic forms of governance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1511 - VIOLENCE & MEMORY IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
How do societies that have endured state terror deal with the memory of that collective trauma? In multiple cases, 20th c. Latin American governments used violence against civilians to silence opposition and defend entrenched privilege. What factors make state terror possible? How do people make sense of 'unspeakable' events? Students will focus on case studies from Central America, the Caribbean, and South America. Analyzing materials including novels, films, family stories, documentaries, and museums, we will explore the making of historical memory, and assess its political consequences.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

HIST 1522 - BRAZIL

Minimum Credits: 3
Maximum Credits: 3
The course begins with an overview of Brazilian culture and of the country's enormous resource base. Cultural change is traced through the pre-Columbian, colonial, imperial, and republican periods. A major theme throughout is the evolution of a Portuguese heritage into today's distinctive Brazilian national culture. The country is then divided into five regions as a means of understanding its internal diversity. Popular American ideas about subjects like carnival, the Amazon Rainforest, coffee, Copacabana Beach, and the huge foreign debt are also dealt with.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1525 - MEXICO, AZTECS TO THE PRESENT

Minimum Credits: 3
Maximum Credits: 3
Mexican history from the Aztecs to the present. We will discuss the conquest, the Colonial Era, the struggle for independence, nineteenth-century liberalism, the porfirian dictatorship, the Twentieth-Century Revolution, the formation of a single party state, the temptations of socialism, the oil boom, the debt crisis, and the "crisis of the system" now being experienced by Mexico.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1526 - CUBA, COLUMBUS TO CASTRO

Minimum Credits: 3
Maximum Credits: 3
A study of Cuba since its discovery. Treatment will be chronological. The 20th century will be stressed. Texts such as Suchlicki, Cuba or Perez, Cuba will be read.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1541 - HISTORY OF THE EARLY CARIBBEAN TO EMANCIPATION

Minimum Credits: 3
Maximum Credits: 3
This course will consider the early history of the Caribbean.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1560 - WOMEN IN LATIN AMERICAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
A course tracing the history of women in Latin America from the conquest to the modern day.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1585 - US-LATIN AMERICAN RELATIONS

Minimum Credits: 3
Maximum Credits: 3
A survey of US-Latin American from 1800 to the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1586 - LATIN AMERICAN REVOLUTIONS

Minimum Credits: 3
Maximum Credits: 3
A comparative examination of instances of social and political revolution in Latin American history. Cases considered include the Haitian Revolution (1791-1804), the Mexican Revolution (1910-1917), the Bolivian Revolution (1952), the Cuban Revolution (1959).

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1604 - RACE AND RELIGION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1610 - UNITED STATES COLONIAL

Minimum Credits: 3
Maximum Credits: 3
This is an upper division course that develops the history of the North American English colonies from around 1400 through the early 1760s.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1611 - AMERICAN REVOLUTION 1763-1791

Minimum Credits: 3
Maximum Credits: 3
This is an upper division course that considers the history of Revolutionary America between the 1750s and the 1790s.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1612 - UNITED STATES 1789-1840

Minimum Credits: 3
Maximum Credits: 3
A history of ideas -- social, literary, scientific, political -- that expressed and shaped the culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1613 - PEOPLE'S REPUBLIC OF CHINA

Minimum Credits: 3
Maximum Credits: 3
This course traces the revolutionary process which brought the communist party of China to power. Changes which have occurred socially, politically, and economically are explored, as are the relations with the countries of Asia, the United States, and various international bodies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

HIST 1614 - CIVIL WAR HISTORY

Minimum Credits: 3
Maximum Credits: 3
This is an upper division course that considers the impact of the Civil War upon the development of the United States.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1617 - UNITED STATES IN THE 1960'S

Minimum Credits: 3
Maximum Credits: 3
This course explores American politics, culture, and society in the 1960s. Topics include the "Camelot's" years of the Kennedy administration, the great society, the Vietnam War at home, the civil rights movement and the rise of the new left and women's liberation movements, rock and roll, the sexual revolution and the counterculture, and the emergence of new age spirituality.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1619 - UNITED STATES SINCE 1945

Minimum Credits: 3
Maximum Credits: 3
Social, economic, and political changes in American society since World War II. Topics include the post-industrial economy, urbanization, women, minorities, education, political movements, government, parties, and political participation. Emphasis is on the massive changes during those years and the impact on people, institutions and government.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1621 - HISTORY OF THE SOUTH THROUGH THE 1880S

Minimum Credits: 3
Maximum Credits: 3
This class will give students experience of dealing with the history of a region within the United States and will permit them to place the history of the South within the context of developments within the nation as a whole. It will also play an important role in expanding our knowledge dealing with slavery and the history of a broadly defined Atlantic region which includes Western Europe, Africa, and North and Latin America.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1625 - HISTORY OF THE AMERICAN FRONTIER

Minimum Credits: 3
Maximum Credits: 3
This course explores the settlement and development of frontier regions across the continent, emphasizing 19th century experiences. Diverse and distinctive frontier societies emerged from the processes associated with land acquisition, exploration, Indian relations, Westward migration, economic development, social organization, governance, and urbanization. The different and conflicting interpretations of the frontier experience raise important questions and perspectives about the character of American society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1628 - THE BLACK WEST

Minimum Credits: 3
Maximum Credits: 3
This is not your traditional American West: The cowboys are Black, the Native Americans are educated strategists, the white settlers marry into Native families, and people of Chinese and Mexican descent navigate varied economies and cultures. This course charts the nineteenth century U.S. governmental policies that created ¿the West,¿ and shows how the broad region was shaped and settled by a diverse group of people. Though we will examine a multicultural group of colonists and Indigenous peoples, our focus is on people of African descent. Looking at the West as a space of the African Diaspora provides an opportunity to center African Americans, as well as other non-white groups as architects of our modern-day culture and

society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1632 - THE HISTORY OF THE CIVIL RIGHTS MOVEMENT

Minimum Credits: 3
Maximum Credits: 3
One of the most celebrated periods of U.S. history, the Civil Rights Movement has been the subject of countless books, memoirs, and films. These narratives, however, have privileged certain individuals and interpretations over others. This course challenges some of the myths, misrepresentations, and omissions in mainstream representations of the movement. While we will examine the significant contributions of key figures such as Martin Luther King, Jr., Rosa Parks, and Malcolm X, the course will also uncover many of the lesser-known individuals who confronted racial discrimination and fought to secure civil and human rights for black people in the United States. Beginning in the 1940s and moving through the 1970s, the course explores several key areas of inquiry including the role of religion, gender, class and sexuality in shaping the movement; the significance of international historical developments; the growth of freedom struggles in the urban North; and the use of armed resistance in the movement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: MIN CUM GPA: 3.25
Course Attributes: Urban Studies

HIST 1640 - AMERICA CHILDHOODS: RACE, GENDER, AND CITIZENSHIP, 1865-PRESENT

Minimum Credits: 3
Maximum Credits: 3
In this course, we will consider the diverse experiences of children and youth in the United States from the mid-nineteenth century to the present day. We will examine how race, class, gender, sexuality, and citizenship informed children's agency and experience, and were in turn influenced by the imposition of ideals of childhood through government policies, medical standards, and educational norms. Special consideration will be given to youth movements, and the role of children and youth in the civil rights movement and other forms of political and social activism. With a few exceptions, the course will offer a consideration of a topic in each decade since the 1860s.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1641 - MODERN AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course examines four party systems: (a) years of party rivalry (1854-1894) in which civil rights and property rights successively dominated the national scene, (b) years of republican dominance (1894-1930) in which sweeping domestic reforms and emerging world responsibilities held the limelight, (c) years of democratic dominance (1930 1968) in which an economy of abundance and responsible internationalism provided the major challenges, and (d) years of participatory democracy (1968-present).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1645 - AMERICAN ECONOMIC HISTORY

Minimum Credits: 3
Maximum Credits: 3
The course presents a survey of the strategic factors in the economic development of the United States from colonial times to the great depression. The topics covered include the record of economic growth, the process industrialization and its major phases, British mercantilism, the role of technological change, demographic history, the slave economy, distribution of income, urbanization, and the financial sector.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1653 - COLD WAR AMERICA IN THE WORLD

Minimum Credits: 3
Maximum Credits: 3
This course explores the impact of the Cold War on the American home front during its years of peak influence, 1945-1965. We will investigate the postwar division of the world into two opposing camps, and then take up topics such as McCarthyism, American reactions to the atomic bomb, the culture of consumption, suburbanization, and youth culture. We will ask how the Cold War climate fostered (or hindered) social movements for racial equality, participatory democracy, and women's rights. At its close, the course asks which hallmarks of the early Cold War - from lonely crowds to paranoid politics - persist today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1655 - AMERICAN WORKERS 19TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
This course examines American working class formation, development, and recomposition during the nineteenth century, and workers' impact on American economic, political, and cultural development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1656 - AMERICAN WORKERS 20TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
This course examines the experiences of American workers during the second Industrial Revolution of the early Twentieth Century, the emergence of a government-sponsored national system of labor relations in the 1930s and 1940s, the structural changes in the economy and labor force since 1950, and the subsequent breakdown of the new deal formula for class relations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1660 - GENDER AND SEXUALITY IN THE US TO 1865

Minimum Credits: 3
Maximum Credits: 3
This upper-level course is part of a two-course sequence which surveys the history of women in the United States. Part 1 focuses on women's experiences from the 1600s to the 1880s with special attention to class, ethnic, and geographic differences among women.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1661 - GENDER AND SEXUALITY IN THE US SINCE 1865

Minimum Credits: 3
Maximum Credits: 3
This upper-level course is part of a two-course sequence which surveys the history of women in the United States. Part 2 focuses on women's experiences from 1865 to the present with special attention to class, ethnic, and geographic differences among women.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1665 - HISTORY OF THE AMERICAN CITY

Minimum Credits: 3
Maximum Credits: 3
This course examines the development of the American city from its colonial origins to its postindustrial expression after the mid-20th century. The growth of an urban system across the nation is briefly addressed. Most attention is focused on the evolution of the city's economy, geography, social organization, and governance under the forces of rural in-migration, foreign immigration, industrialization, and changing technologies of transportation, communication, and energy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1668 - HISTORY OF PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
This course explores the development of Pittsburgh's life and landscape from its frontier origins in the 18th century to its Renaissance of the mid-20th century. The city and its region are addressed as a case study in American social history and urbanization. Pittsburgh offers the opportunity to examine the transformation from a commercial city to an industrial metropolis with the attendant social, political, labor, and redevelopment issues which characterize American urban life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1669 - HISTORY OF BLACK PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
This course will explore the role and experiences of black Pittsburghers over the past 200 years of the city's history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1670 - AUGUST WILSON: THE MAN,THE ERA, THE PLAYS

Minimum Credits: 3
Maximum Credits: 3
August Wilson is recognized as one of America's leading playwrights. His plays form part of America's literary canon. Wilson wanted his cycle of ten plays - each set in Pittsburgh in a different decade of the twentieth century - to provide a chronicle of the black urban experience. At the same time, the protagonists of Wilson's plays, as he himself once said, "all come out of me, they are - probably - the different aspects of my personality." This course will enable students to grapple with two questions coming out of this: (1) to what extent Wilson's plays re-create the twentieth-century urban black experience; and (2) the extent to which, rather, the plays reflect Wilson's own identity and persona.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1672 - RELIGION AND SEXUALITY

Minimum Credits: 3
Maximum Credits: 3
Though American political ideologies have often tried to situate both sexuality and religion as private matters that have no bearing on public life, the topics we discuss in this course reveal that quite the opposite is true. This course will trace how religion and sexuality have played an intertwined and formative role in the development of the political and social history of the United States. We will take a chronological approach to our subjects, locating the intersections between religion and sexuality throughout the course of American history, from Puritan attempts to control women's sexuality to contemporary debates over reproductive rights and same-sex intimacy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1676 - POPULAR RELIGION IN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Students will examine forms of religion that are called everyday, folk, local, or popular traditions, in contrast to "official" denominational categories that so often dominate the study of religion. With our focus on the western hemisphere, we will learn about new local practices that have emerged since 1492 among African, Caribbean, and native American peoples and to analyze how they represented responses to colonization, industrial capitalism, or globalization. Examples of popular traditions that we will study include: witchcraft; santeria, voodoo, saint's cults, miracles, pilgrimages, speaking in tongues, faith-healing and snake-handling. The course method is interdisciplinary, drawing upon anthropology, documentary film, history, religious studies, psychology, and sociology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1677 - AMERICAN JEWISH EXPERIENCE

Minimum Credits: 3
Maximum Credits: 3
We analyze the Jewish experience in America since the middle of the 18th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1683 - NORTH AMERICAN INDIANS TRADITIONAL CULTURES

Minimum Credits: 3
Maximum Credits: 3
This course examines the effects of European conquest upon North American Indian cultures (1550-1900).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1685 - U.S. POPULAR CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course examines the development and social impact of mass-produced and mass-consumed forms of culture in Twentieth Century America.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

HIST 1686 - WAR AND MILITARY IN UNITED STATES

Minimum Credits: 3
Maximum Credits: 3
A lecture-discussion course on the roles military systems play in international and national affairs, as well as in the social and economic life of the U.S. the effects that wars and military service have on the individual, the family, the economy, and politics are also addressed. This is not a course on battles, tactics, logistics, strategy, and command. It is concerned with recruitment and social origins of military personnel; training and value inculcation; combat behavior and morale; war crimes and the laws of war; civil military relations; veterans; and inter-service rivalry.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1687 - U.S. FOREIGN POLICY IN AFRICA

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the increasing engagement of the United States in Africa from the late 19th century until the present. Using a case study approach, students will analyze American foreign policy in Africa and explore the varied effects of those policies. These case studies will include the political realities of decolonization, the Cold War, and economic aid and the social and cultural ties of black Americans to Africa. The course will identify specific crises in American and African history as focal points for study, but will also provide a larger narrative about American involvement in both the colonial and post-colonial development of Africa.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1690 - AMERICAN LEGAL HISTORY

Minimum Credits: 3
Maximum Credits: 3
A lecture-discussion course on the creation, transformation, and administration of the common law and equity from the 17th century to the present, its devolution from England and its evolution in America. Courts, the bar, legislatures, regulatory agencies, police, prisons, and the Constitution are all addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1691 - LATINO HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course will analyze the forces shaping population movements between Latin America and the United States and how these have evolved over time. We will explore how Latino immigrants have integrated, resisted, and adapted to the forces impacting their lives in the United States over the last century and a half, creating new ethnic, racial, and regional identities in the process. We uncover the varied experiences of Latinos and Latin American immigrants with racism and discrimination, identity formation, community building, work and labor struggles, and social mobility as we map out the heterogeneous mosaic of Latin American and Caribbean diasporas in the United States.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1692 - LGBTQ IN THE USA, 1900-PRESENT

Minimum Credits: 3
Maximum Credits: 3
With growing contemporary interest in LGBTQIA issues and student activism surrounding gender identity and sexuality, this course provides necessary historical context for understanding such political and cultural phenomena in 20th-century U.S. history. It charts the trajectory of different identities and sexualities (too often classified as transgressive or deviant) from the beginning of the century through post-World War II efforts to seek greater freedom and inclusion in American society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1694 - THE PLASTIC AGE

Minimum Credits: 3
Maximum Credits: 3
The word plastic derives from the Greek word plassein, which means "to mold or to shape." This course looks at the history of how, within almost a single generation, new modes of consumption, production, bodily manipulation and credit become such a universal part of everyday life that they frame interactions throughout the entire planet. How can we understand the rise of mass consumption in the postwar era? What kinds of changes need to take place to reconstruct how Americans think of themselves, their wages, their material possessions, and the environment in the time period from the end of the 19th Century to the end of the 20th century? What are the long-term effects of this new mode of operating in the world? How does this consumption reshape our planet and what insight we can learn from the past about how we might make changes that might help us to save it?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1695 - ENVIRONMENTAL HISTORY

Minimum Credits: 3
Maximum Credits: 3
Environmental affairs since World War II with an emphasis on policy controversies. Topics include air and water pollution, public lands, wildlife, energy, toxic chemicals, urban environment, facility siting and more. Emphasis on the rise of environmental values in American society, the resulting policies, opposition to them, and the role of science, economic analysis, technology and management in the public debate.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1706 - DRUGS IN GLOBAL HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course examines the global development of the modern "pharmaceutical era" through historical, anthropological, and sociological analyses. It traces the ever-increasing role played by chemical substances in shaping conceptions of health, treatment, and society itself from the early modern period until the present day. Topics include pharmaceuticals as an arena for competing and complimentary interests, the social character of drugs (both legal and illegal), the blurred lines between medicinal and recreational use, and the evolvement of government and scientific regulation of medications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1707 - GENDER IN GLOBAL HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course examines world history from 1500 through the present from the perspective of gender. It provides an introduction to modern world historical patterns and processes, with a focus on issues of women, gender, and sexuality. The course considers the construction of gender in pre-feminist and post-feminist contexts, and explores how global historical developments have shaped ideologies and politics of gender. The course emphasizes topics including slavery, colonialism, imperialism, industrialization, nationalism, and environmentalism, through the lens of gender.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1709 - GLOBAL HISTORY OF SCIENCE FROM THE 17TH TO THE 20TH CENTURIES

Minimum Credits: 3
Maximum Credits: 3
Entails the exploration of a fairly new sub-field within world history: the study of long-distance, transnational, inter-cultural circuits of scientists, texts, instruments, and discourses between approximately 1500 and the present. Focusing on scientific developments in the Americas, Asia, and Africa, this course interrogates Eurocentric accounts of the history of knowledge.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1711 - GENDER AND JEWISH HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course will highlight the impact of gender in modern Jewish history, revealing the divergent experiences of Jewish women and Jewish men as they adapted to the modern world. We will take an international approach to this history, tracing the ways in which circumstances in Europe, America, and the Middle East shaped how Jews understood and responded to gender roles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1712 - INVENTING ISRAEL: ZIONSM, ANTIZINSM AND POST ZINS,

Minimum Credits: 3
Maximum Credits: 3
In this course, we will study the origins and development of Zionism as a form of modern Jewish nationalism, the emergence of different Zionist ideological streams, and non-Zionist, anti-Zionist, and post-Zionist views of Jews and non-Jews. We will also explore Zionism as a case study of relations of religion and nationalism in modernity. This course is an opportunity to carefully study and to contextualize writings and ideas of religious and political thinkers that have been both influential and controversial. The goal is to offer students historical background to ideas and issues of contemporary importance as well as skills in interpretation and contextualization of complex texts that continue to inform public discourse.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1714 - DEATH IN MEDITERRANEAN WORLD

Minimum Credits: 3
Maximum Credits: 3
In many cultures, people sometimes ask fundamental questions about their existence, including, "what happens after we die?" This course will focus on the evolution of beliefs and rituals related to death and the afterlife in and around the ancient Mediterranean Basin, including Egyptian, Greek, Etruscan, and Roman cultures. Using an interdisciplinary approach, we will combine methodologies from anthropology, classics, history, and religious studies. Topics to be covered include myths of the afterlife, books of the dead, magic and death rituals, funeral practices and paraphernalia (disposal of the dead), cults of the dead, divinization, heaven and hell, judgment, and the impact of Christianization on the ancient understanding of death.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HIST 1720 - WEST AFRICA IN THE ERA OF THE SLAVE TRADE

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to the history the societies of West and West-Central Africa. It explores the enormous linguistic and cultural variation among these societies and examines their political, economic and social evolution during the centuries of the trans-Atlantic slave trade (roughly 1600 to 1850). Students are encouraged to think about how complex historical processes occurring around the entire Atlantic Ocean basin affected the development of states and societies in Western Africa.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1722 - MODERN SOUTH AFRICAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
The course will be organized chronologically and use specific conflicts (strikes, political demonstrations, repression, etc.) to focus on various key moments in South African history. The course will utilize both secondary readings from books and articles and a large number of primary materials (ranging from manifestos to novels to film) to generate discussion and further an understanding of the roots of conflict and creation of identity in modern South Africa. Labor and the organization of the work and production processes will be one lens through which ethnic and racial antagonism can be analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1725 - DISEASE AND HEALTH IN MODERN AFRICA

Minimum Credits: 3
Maximum Credits: 3
This course explores the history of health, healing, and disease in modern Africa, focusing on the social, political, economic, and environmental aspects of illness and health. The course also provides an orientation to the changing burdens of disease in Africa in the past 300 years. Seeking to understand change and continuity in Africans' experiences of health and healing, how have historical processes shaped understandings of disease, misfortune, and illness? Within what contexts should health interventions be understood? How and when did health in Africa become a global issue?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1731 - THE HISTORY OF GOD

Minimum Credits: 3
Maximum Credits: 3
God has a history. In the earliest days of that history, God was worshiped as one of a plethora of deities controlling various spheres of cosmic activity or the human world. Students in this course will learn about this ancient pantheon - how gods functioned in society and how their presence was experienced by those devoted to them. They will then trace the evolution of the God of Israel from a mountaintop deity of the southern Levant in the late second millennium BCE to a supreme deity worshiped by a small group of absolute monotheists based in Jerusalem in the mid-first millennium BCE. Students will become more sophisticated readers of biblical texts in the process. The sources of the Hebrew Bible reflect not a homogeneous monotheism, but rather a diverse set of belief systems tending toward henotheism or even polytheism. By appropriating and reinterpreting the religious myths of their neighbors, the Israelites arrived at a character of the divine that has proven problematic to many contemporary theologians, particularly on issues of LGBT rights, women's rights, and the environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1732 - GLOBAL CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course takes Christianity as a prism through which to consider the origins and growth of global religions. Christianity has tried to achieve a global status since its inception in the ancient Mediterranean world in the first century CE. Stemming from Paul's fateful decision to evangelize the Gentiles, Christianity has long sought to achieve a global network of believers, who now comprise about 20% of the world's population. We will study Christian globalization in the twentieth and twenty-first centuries and focus on two Christian traditions, Catholicism and Pentecostalism, as examples of religions that have deliberately and successfully globalized. We will ask if the contemporary values of and pluralism relativism are good for religions and religious people. And, where religion is no longer a powerful cultural force, what are the prospects for a purely humanitarian approach to common problems in a globalizing world?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1733 - RELIGIOUS DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
What is the best way to accommodate religious and cultural diversity within a nation-state and in civil society? How should individual rights to practice religion be balanced with communal needs? Should freedom from religion be protected as much or more than freedom of religion? These are pressing contemporary issues in many countries, including the United States, but issues of religious diversity and questions of whether and how to tolerate religious minorities have a long history. In this course, we will examine the toleration of minority religions in particular historical settings, and the issues and problems (both doctrinal and social/political) that societies grappled with as they confronted diverse religious landscapes. We will also use these historical precedents as a lens to examine contemporary examples of religious pluralism, diversity, and conflict. Case studies will mainly be drawn from pre-modern Europe and modern Europe and North America, but we will also look at Mughal and modern India and discuss religion in pre-modern China.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1740 - BUDDHIST MEDITATIVE TRADITIONS

Minimum Credits: 3
Maximum Credits: 3
Buddhist meditation is perhaps the best known of all Buddhist practices particularly in Western countries. In both Asia and the West, it has been popularized in recent times as a technique that can be used for such secular purposes as reducing stress and managing eating disorders. But what is Buddhist meditation? How it is practiced in its traditional contexts? What are the doctrinal foundations of meditation practices? What are the traditional purposes of practicing Buddhist meditation? What are the various types of meditation explained in Buddhist texts? How this practice evolved over time in different geographical regions in Asia? What are the roles of Buddhist or state institutions in shaping meditation practices? Focusing on these questions, this course examines the breath of Buddhist meditation practices and their historical evolution and transmission in Asian Buddhist countries. The course covers the role of meditation in early Indian Buddhism, the development of different types of meditation in Theravadan Buddhist countries, the emergence of the Chan school of meditation in China and its transmission to Japan (Zen), the appropriation of tantra to Buddhist practices in Tibetan Buddhism, and the modernization of Buddhist meditational practices during the colonial period. The course is taught using classical Buddhist texts and meditational manuals in translation, secondary studies, testimonials and films. In the process, we expect to enhance our familiarity with religious practices and our understanding of the human experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1741 - POPULAR RELIGION IN CHANGING JAPAN

Minimum Credits: 3
Maximum Credits: 3
This seminar, through a thematic treatment of popular and civil religion, informed by religious and cultural history, looks at the process through which religion participates in shaping and reshaping worldviews, behaviors, and practices in modern Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1746 - ATHLETICS OF THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
This course examines athletic competition, popular games, gladiatorial and other exhibitions of the ancient Greeks and Romans. Much emphasis on the social/cultural context and underlying values. Attention to relevant artistic archaeological, and historical settings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1749 - ISLAM & CONFLICT IN GLOBAL CONTEXTS

Minimum Credits: 3
Maximum Credits: 3

This course will investigate political, social, and ideological conflict involving international political actors (both states and non-states) claiming motivation by, or inclusion within, the contemporary tradition of political Islam. Lecture topics within this course will take a global approach, analyzing political, social, and/or sectarian conflict in central and southern Europe (to include religious conflict and ethnic on the Balkan peninsula in the late twentieth century); southern and southeastern Asia (to include religious tension on the Indian subcontinent and on the island nation of Sri Lanka); East Africa (to include recent political violence centering around the self-declared caliphate "Boko Haram,"); and the middle east (to include ongoing international efforts to interdict against the expansion of the self-styled Islamic state in Iraq and Syria). Lectures in this course will aim to explore the means by which international conflict and violence involving these (and other) actors is bound by the tenets, institutions, or characteristics of Islam. These investigations will include inroads into a well-framed understanding of the recent increase in the presence and/or influence of Islamic political movements and the rising influence of international Islamic political parties in each of the aforementioned geographic locale. Course investigations will simultaneously explore the growing trend towards the transnational movement of goods, ideas, and peoples spurred on by or otherwise connected to the ideological tenets of contemporary Islam. The focus within these investigative pursuits will be on connective, global, and conceptual themes within seemingly disparate political movements and actors. Conceptual themes to be investigated include, but are not limited to the structures of global capitalism, economic inequality, gender inequality, minority rights, human rights, colonialism and imperialism, democracy and governance, modernity versus traditionalism, and secularism versus religiosity. Each of these themes is to be unraveled and explored in various contemporary global contexts focusing in particular on the polities and societies in the aforementioned conflict zones.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1753 - THE OTTOMAN EMPIRE (1300-1923)

Minimum Credits: 3
Maximum Credits: 3
This course traces the history of the Ottoman Empire from its origins as an obscure band of frontier warriors, to the highpoint of its geopolitical power in the sixteenth century, and on to its further evolution as an increasingly complex and peaceful society, down to the opening of the period of European imperialism and nation building. It will address not only the Ottomans' political power, but also those economic, social, and cultural factors that helped explain that power and gave the empire such a distinctive place in the history of Western Europe, Balkans and the Middle East.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1754 - RELIGION AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course will be to consider the public and political implications of religion in several different political systems. We will begin with an overview of the implications for politics of various types of religious systems. Religious beliefs and institutions have wide ranging implications for civic norms, public policy, political leadership, and the treatment of various social groups, including women and minorities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1757 - RELIGION IN INDIA

Minimum Credits: 3
Maximum Credits: 3
An introduction to the religious traditions that have developed in the Indian subcontinent and their role in shaping the cultures of India.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1758 - HINDU MYTHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Focusing on the modern period and on Hinduism, we examine recent developments in the history of religion in India.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1760 - JEWS AND JUDAISM IN THE MEDIEVAL WORLD

Minimum Credits: 3
Maximum Credits: 3
An introduction to the facets of medieval and early modern Jewish life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1761 - CONTEMPORARY ISLAM: INTERNAL DEBATES

Minimum Credits: 3
Maximum Credits: 3
From the second part of the 19th century, Muslim intellectuals have been involved in an intensive ideological/theological debate. While this debate was prompted by the strong presence and influence of the West, it has not been simply a debate between the Islamic fundamentalism and the Western world. The modernist and fundamentalist debates of the last century are primarily the internal debates around historically significant issues that transformed Islamic intellectual traditions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

HIST 1762 - RELIGION AND POLITICS OF THE MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the role of religion in the politics of the contemporary Middle East. A general survey of the role of religion in the history of the region, and a cross regional historical-comparative view of the relationship between religious phenomena and political movements and institutions set the context for an investigation of the politics of religion in recent developments in the region.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HIST 1763 - POLITICS OF CONTEMPORARY MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3
The main emphasis of the course will be on conflict and conflict resolution in the Middle East. Conflict has been a constant feature of the region since 1945. This course will be primarily concerned with how and why these conflicts are generated, escalate, become protracted, and are resolved.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1765 - ISRAEL IN THE BIBLICAL AGE

Minimum Credits: 3
Maximum Credits: 3
This course explores the history and development of the people of Israel in ancient times. What do we know about the Israelites and how do we know it? Using biblical texts and archaeological remains, students will learn about everyday life in ancient Israel, the role of class and gender, life-cycle events, religious festivals, political institutions, systems of belief, and famous personages in history and lore. The trajectory of the course will begin with the Near Eastern origins of the people, continue through the rise of the Israelite and Judahite monarchies, and end with the Second Temple commonwealth of Judea in the Persian and Hellenistic periods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1766 - MODERN ISRAEL AND PALESTINE

Minimum Credits: 3
Maximum Credits: 3
We trace the history of modern Israel from the idea of the return in the second half of the 19th century through the state of Israel today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1767 - JEWS AND JUDAISM IN THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
What is a "secular Jew?" How was medieval anti-Judaism different than modern anti-Semitism? How did German Jews go from being full citizens of their country to victims of genocide? What was the relationship between Middle Eastern Jews and European Jews during the age of colonialism? Why did some Jews think it necessary to build a nation of their own, while others were content to be citizens of non-Jewish states? In this course, we talk about these and other questions that are critically important not only to the history of Jews, but also to the history of the modern world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1768 - CHRISTIANS MUSLIMS JEWS IN THE MIDDLE AGES: CONNECTION & CONFLICT

Minimum Credits: 3
Maximum Credits: 3
Was the world of Europe and the Middle East before the Enlightenment a period of unending religious conflict and intolerance? Were Jews the victims of severe persecution and violence everywhere during this period? Did Christians and Muslims engage in unceasing religious wars? The answer to all three of these questions is no. While the Middle Ages were a period of conflict and competition between the three major western religious groups, they were also a time of coexistence and cooperation. This class shifts from extreme dichotomies and simplistic stereotypes to deeply examine the period in all of its complexity: what were the theological, political, and legal contexts in which Christians, Muslims, and Jews interacted in both Christian Europe and the Muslim world? How did these deeply religious societies organize themselves to tolerate the religious "Other"? When and why did toleration break down and lead to expulsion, forced conversion, or violence? What kinds of cross-cultural exchanges and cooperation take place in economic, cultural, intellectual, and social life? We will also look at new ideas of toleration (and intolerance) that emerged at the end of the Middle Ages and examine aspects of inter-religious encounters and dialogues today. We will discuss not only the significance of Jewish-Christian-Muslim interactions in the Middle Ages but also assess these encounters as a case study in the broader history of religious diversity, pluralism, and conflict.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1769 - HOLOCAUST HISTORY AND MEMORY

Minimum Credits: 3
Maximum Credits: 3
The holocaust - that is, the genocide of six million Jews in Nazi-occupied Europe during World War II - was a critical event of the early twentieth-century that continues to resonate today. Our historical survey will look at the holocaust primarily through the experiences of its Jewish victims, though we will discuss some of the other groups, such as the roma, disabled people, and gay men, who were also targeted and systematically murdered by the Nazis. Additionally, we will think about the perpetrators of the holocaust and the ideologies that led to the genocide, such as racism, nationalism, and antisemitism. Finally, we will move beyond the history of the holocaust to think about the ways that this event has been remembered and reconstructed by survivors, nations, institutions, museums, the arts, popular culture and the media. Looking at how institutions here in Pittsburgh commemorate the holocaust will offer us local, concrete examples of how people continue to grapple with this history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1772 - RACE, CASTE AND ETHNICITY IN A GLOBAL PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
This course will compare and contrast the ways in which race, caste and ethnicity operate in a variety of national, economic, demographic and cultural settings, notably Cuba, Brazil, South Africa, India, China, and the U.S. The course will include films, readings and slides obtained for a semester-at-sea voyage to those countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

HIST 1775 - ORIGINS OF CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course presents a historical-critical investigation of Christian origins. Special attention is paid to varieties of 1st century Hellenistic and Palestinian Judaism within the Greco-Roman world. Primary readings include selected Biblical passages and apocrypha, 1st century historians and philosophers (Josephus, Tacitus, Suetonius, and Philo), the New Testament corpus (including Paul and the Pastorals), and selected readings from the Dead Sea Scrolls. In addition there will be assignments from various modern New Testament critics, historians, and theologians.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1776 - VARIETIES OF EARLY CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
Through early Christian literature (such as non-canonical gospels and the writings of the Church Fathers) and various types of archaeological evidence, this course examines the many different and often competing forms of Christianity that developed in the first four centuries of the common era. Among the areas of examination are key theological issues, creedal formulation, Gnosticism, martyrdom, asceticism, Christian relations with pagans and Jews, and the battles over orthodoxy and heresy. We also assess the conversion of Constantine and the social and political implications of the Christianization of the Roman Empire.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1779 - JERUSALEM: HISTORY AND IMAGINATION

Minimum Credits: 3
Maximum Credits: 3
The holy city of Jerusalem is at the heart of the Western religious imagination and of contemporary political conflict in the Middle East. Traditionally it has been a center of religious pilgrimage, home to Israelite kings and Islamic caliphs. Today it is a cutting-edge urban center marked by stunning demographic diversity, a rapidly expanding economy, and an intractable political crisis. In this course, we will examine the history of the city-from its earliest days to today-with an eye toward its religious significance in Judaism, Christianity, and Islam. Special attention will be given to Jerusalem's changing urban fabric: its architecture, neighborhoods, natural resources, economy, and religious institutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1780 - JEWS AND THE CITY

Minimum Credits: 3
Maximum Credits: 3

Comedian Lenny Bruce riffed in 1963 that "If you live in New York or any other big city, you are Jewish. It doesn't matter even if you're Catholic; if you live in New York you're Jewish." In this course, we will discover why Lenny Bruce -- and so many other observers of Jewish life -- came to understand urbanity as a core component of the Jewish experience. We will begin our study of the Jewish encounter with urban life in the 19th century, as millions of Eastern European Jews migrated from the small villages of their birth to cities across the globe. This course will trace this Eastern European Jewish diaspora to urban destinations around the world, before training its lens on the Jewish encounter with American cities. We will pay close attention to how patterns of Jewish urbanization changed regionally and over time; how urbanization affected Jews' home-life, leisure time, religious practices and occupational choices; how differences in gender and class affected Jews' experiences in urban spaces; and how Jews interacted with other ethnic groups in diverse, urban environments. Delving into the history, built environment, and archival sources pertaining to the Jewish experience in Pittsburgh will provide us with a dynamic case study for this crucial relationship between Jews and the city.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1781 - ROMAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course surveys the history of Rome from the earliest times through the late empire, with particular emphasis on political and social developments during the late republic and early empire.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1783 - GREEK HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course surveys the history of ancient Greece, with special emphasis on political and social developments during the fifth century B.C.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HIST 1787 - CHRISTIAN-MUSLIM RELATIONS

Minimum Credits: 3
Maximum Credits: 3
This course surveys the historical interaction between Christian and Muslim communities over the past 1400 years and focuses on the art of polemic as an important tool in the human construction of religious concepts. We will begin by understanding the evolution of Islam in the Seventh Century, and continue with the encounters between Islam and the Byzantine Empire, and the medieval caliphate's encounters with the West, including the crusades. We will then consider specific elements of the interaction between Christian and Muslim communities, drawing from a variety of Muslim communities in Europe and the United States.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1790 - MEDITERRANEAN WORLD SINCE 1500

Minimum Credits: 3
Maximum Credits: 3
With uniformity and diversity in the Mediterranean world as its overarching theme, this course examines the singularly important role of "the sea between the lands" from the fall of Rome to the present day. Concentrating on the lands and people of the Northern shore from Gibraltar to Anatolia, the focus alternates between thematic approaches to the Mediterranean region as a whole and specific attention to the sub-regional histories of Iberia, Italy, and the Balkans.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1794 - ISLAM, LAW, AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
The emergence of modern Islamic political movements worldwide has had not only a profound impact on contemporary global geo-politics but has also triggered heated debates around the question of the compatibility of Islam with liberal democracy. This class investigates the "vexed" relation between Islam and politics, profoundly influenced by the experience of colonialism, and standing in complex relationship to concepts such as the modern nation-state, democracy, liberalism, or secularism. The class will combine empirically grounded studies the multiple facets of past and contemporary Muslim politics in Muslim-majority and minority contexts with a more theoretical investigation of modern Islamic political thought; here it will examine its intellectual origins, its arguments, the challenge it poses to its liberal counterparts, but also its conundrums and contradictions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HIST 1796 - HISTORY OF AFRICA SINCE 1800

Minimum Credits: 3
Maximum Credits: 3
Surveys history of Africa from 1800 to the present day. Major themes include African statecraft, European colonization, African nationalism and postindependence problems. Processes of African institutional growth within the perspectives of resiliency, change and adaptation will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HIST 1801 - GLOBAL STUDIES CAPSTONE COURSE

Minimum Credits: 3
Maximum Credits: 3
This course serves as the annual capstone course for Global Studies certificate students and others writing BPhil or honors theses on global topics, past or present. Taught by the UCIS Visiting Professor in Contemporary Global Issues (GSC post-doc), the course is a workshop for student writing complemented by readings selected to initiate productive conversations that link the students' various research projects and that locate those projects in the appropriate historical, social, and cultural context(s). It is designed, generally speaking, to provide students with dedicate hours in their work weeks to devote to thesis writing, to help students frame and contextualize their research through renewed engagement with literature on relevant topics, and to ensure that thesis projects are well connected to broader global processes.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

HIST 1802 - REES CAPSTONE COURSE

Minimum Credits: 3
Maximum Credits: 3
International Communism and Anti-Colonialism When the Communist International (Comintern) was founded in the Soviet Union in 1919, its support for national liberation was a main draw for colonial peoples to join communist movements. This research seminar will examine the history of international communism from the formation of the Comintern in 1919 to decolonization in the 1960s to understand how communist movements addressed questions of imperialism, race and racism, national liberation movements and revolution in Asia, Africa, the Middle East and Latin America. Emphasis will be on the relationship between the Soviet Union, indigenous communist movements in the so-called Third World, and the ways issues of race, class, and nationalism shaped those movements. This course is an undergraduate research seminar. However, instead of writing a research paper, students will be required to produce a short audio documentary (5-10 minutes) on a topic related to the course. Therefore, in addition to interrogating the history of international communism, students will learn the basics of audio documentary making, scriptwriting, narration, interviewing, audio editing, Adobe Audition and digital recording equipment. No prior experience in audio production or equipment is required. This course is designed to fulfill the Capstone requirement for the Certificate in Russian, East European, and Eurasian Studies.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: LG/SNC Elective Basis

HIST 1803 - GLOBAL ASIA CAPSTONE

Minimum Credits: 3
Maximum Credits: 3
Asia is by far the largest and most populous continent on Earth, and home to significant social, political, and economic diversity. Yet far too often the history and culture of Asian countries are taught without reference to their regional and global connection, or if a connection is made, it is defined by European colonial history. In this course, we will consider Asia in terms of connections that define the continent. We will look at how Asia from a national, regional, and global perspective, with an eye to the way that Asia has influenced and connected the planet. From anime, k-pop, and Bollywood to global economic flows to political, religious, and ethical thought, we will look at how Asia is and has been a global phenomenon. Throughout this student led course, we will work on developing a research question, doing primary and secondary research, and in the end of producing a capstone research project.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

HIST 1900 - HISTORY INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
This course enables students to combine academic training and practical work experience related to the major.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

HIST 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Individual project administered under the supervision of a faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

HIST 1902 - WRITING: HISTORY HONORS SEMINAR

Minimum Credits: 3
Maximum Credits: 3
The content of the course will vary according to the faculty member teaching it. It will center on a theme involving historical writing/research, developing skills required for primary historical research. Students will complete a number of writing requirements. Attention will be directed towards style, structure, and issues of academic presentation, as well as historical content. Seminar forms a part of the departmental honors program.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

HIST 1903 - HONORS THESIS/MAJORS

Minimum Credits: 1
Maximum Credits: 9
This course is only for students writing an honors thesis.
Academic Career: Undergraduate
Course Component: Thesis Research
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

HIST 1904 - UNDERGRADUATE RESEARCH ASSISTANT

Minimum Credits: 1
Maximum Credits: 6
This course offers students the opportunity to participate in a research project, working as a research assistant under the guidance of a history professor. The aim of the course is to give the student training in historical research methods, and also to promote mentoring relationships between students and faculty. Subject to faculty approval more than one enrollment is possible.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

HIST 1905 - UNDERGRADUATE TEACHING EXPERIENCE

Minimum Credits: 1
Maximum Credits: 3
This course offers the opportunity for qualified third-and fourth-year students to assist in teaching history lecture course. Each student must have taken the course previously as a student (with a minimum grade of B) and will work under the direct supervision of the relevant history faculty member. Each student must receive permission of the instructor, complete a teaching agreement with that instructor, and get permission from one of the advisors in the department. Credits gained through this course may only be used toward the elective requirement of the history major.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

HIST 1906 - ATLAS INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The Digital Atlas Design Internship supports student research by teaching interns how to use digital tools and methods to explore the global past. Students manage a semester-long independent research project using an interactive, public-facing platform that utilizes GIS and web design skills gained during the internship. Students engage with both world history and digital humanities while developing a spatial database about a topic of their choosing. Experience with digital methods or GIS is not necessary, and students can receive publication credit for their work. To learn more about the Digital Atlas Design Internship, please visit https://www.worldhistory.pitt.edu/digital-atlas-design-internship. You can also view past internship projects by visiting our project gallery at https://www.worldhistory.pitt.edu/projects.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

History and Phil of Science

HPS 0410 - EINSTEIN: MODERN SCIENCE AND SURPRISES

Minimum Credits: 3
Maximum Credits: 3
Do astronauts age more slowly? Can a finite universe have no edge? Is time travel possible? Can time have a beginning? Does the moon change because a mouse looks at it? Surprisingly, modern science answers yes to all these questions. This course provides simple-to-understand explanations of these and other related questions, their broader philosophical significance and their histories. The course is suitable for students with no science background but with an interest in the world of modern science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 0427 - MYTH AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
The Greeks in the sixth to fourth century B.C. Initiated forms of thinking we have from then on called "scientific" and "philosophical". This course examines the question of how science is distinguished from "non-science" by studying the role of myth and science in ancient Greece. The aim is to understand what distinguishes the ideas of the first scientists and philosophers from those earlier beliefs called myth.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Global Studies, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

HPS 0430 - GALILEO AND CREATION OF MODERN SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Galileo is the father of modern science. This course explores his revolutionary discoveries, his attack on Aristotle's natural philosophy, and his transformation of the notion of science, and his epoch-making clash with the religious authorities of the time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HPS 0437 - DARWINISM AND ITS CRITICS

Minimum Credits: 3
Maximum Credits: 3
Charles Darwin's ideas have had an enormous impact on biology and on culture generally. These ideas have been criticized within biology, by philosophers, social theorists and religious fundamentalists. This course studies the historical growth of Darwinism and the criticisms mentioned, and evaluates those criticisms and their impact on the theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HPS 0515 - MAGIC, MEDICINE AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course introduces students from all backgrounds to humanistic ecology, an interdisciplinary method of learning which combines the humanities with science. Humanistic ecology teaches how to integrate scientific research, philosophy, pedagogy, literature, and health in a holistic framework. Students will learn about classical forms of self-transformation, healing, and knowing that will help them find original pathways to knowledge and wellbeing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HPS 0517 - THINKING ABOUT THE ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
The goal of HPS 0517, thinking about the environment, is to promote clear and rigorous thinking about environmental issues such as nuclear power, global warming, acid rain, or the use of chemical pesticides. Deciding where to stand on such issues depends on being able to evaluate both scientific and philosophical arguments. We aim to help students develop the skills needed to find the best available information on an environmental issue, and to make informed judgments about what conclusions, and what actions, are warranted on the basis of that information.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

HPS 0545 - SPACE-TIME-MATTER ANTIQU-20THC

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course for students with either scientific or non-scientific backgrounds. It examines the development of the concepts of space, time and matter from the crucible of ancient Greece to the 17th century scientific revolution and foreshadows the revolutionary modifications of the

19th and 20th centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 0605 - THE NATURE OF THE EMOTIONS

Minimum Credits: 3
Maximum Credits: 3
This course will examine selected historically important theories and portrayals of the human emotions and passions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 0608 - PHILOSOPHY AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
An introductory course in philosophy of science
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 0610 - CAUSAL REASONING

Minimum Credits: 3
Maximum Credits: 3
Do school vouchers really help inner city students become better educated? Do gun control laws really make society safer? This course examines how scientists reason about causal claims like these. It considers use of scientific statistical data that informs our public policy debates. The course uses an interactive, web-based text and exams. In addition, there is an on-line virtual "causality lab" in which students will set up, run, and then analyze simulated experiments. They will construct causal theories, use the lab to derive predictions from these theories, and then test the predictions against the simulated data. While course materials are delivered on-line.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, Hybrid

HPS 0611 - PRINCIPLES OF SCIENTIFIC REASONING

Minimum Credits: 3
Maximum Credits: 3
This course will provide students with the skills to understand and assess scientific claims that confront them in daily life. Special attention will be given to reasoning based on samples, evaluating hypotheses and causal claims, as well as common mistakes in scientific reasoning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

HPS 0612 - MIND AND MEDICINE

Minimum Credits: 3
Maximum Credits: 3
Mind and medicine deals with fundamental problems and questions that arise in considering the nature of mental health, mental illness, and branches of medicine that aim to promote mental health and treat mental illness. We will begin by considering the concepts of 'health', 'disease' and 'illness' in general, and several different models of medicine. From there we will move on to a consideration of the nature of explanation in medicine generally. We will examine some explanatory successes in the domain of physical health and disease, and consider how those successes were achieved. In the second half of the course we will look at controversies over the question of whether there is such a thing as mental illness, and if so, how one is to define, diagnose and treat it. In order to better understand what is at stake, we will explore these controversies by focusing on a specific mental illness, schizophrenia. Looking at recent research on schizophrenia will allow us to see the extent to which the kind of understanding we have achieved in physical medicine is or is not to be expected with serious mental illness. Students who successfully complete this course will be able to

identify and analyze different philosophical approaches to selected issues in medicine and psychiatry; have gained insight into how to read and critically interpret philosophical arguments; and have developed skills that will enable them to think clearly about foundational questions as future or current health care providers, policy makers, and consumers. This course is also part of a core sequence leading to certification in the Conceptual Foundations of Medicine Certificate Program, and is a companion course to HPS 0613 (Morality and Medicine) but may be taken independently. The course is of particular interest to pre-medical and pre-health care students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 0613 - MORALITY AND MEDICINE

Minimum Credits: 3
Maximum Credits: 3
Ethical dilemmas in the practice of health care continue to proliferate and receive increasing attention from members of the health care profession, ethicists, policy makers, and the general public as health care consumers. In this course we will examine a number of ethical issues that arise in the context of contemporary medical practice and research by analyzing articles and decision scenarios. Topics to be covered typically include the physician-patient relationship; informed consent; medical experimentation; termination of treatment; genetics; reproductive technologies; euthanasia; resource allocation; and health care reform. Students who successfully complete this course will be able to identify and analyze different philosophical approaches to selected issues in medical ethics; have gained insight into how to read and critically interpret philosophical arguments; and have developed skills that will enable them to think clearly about ethical questions as future or current health care providers, policy makers, and consumers. This course is part of a core sequence leading to Certification in the Conceptual Foundations of Medicine Certificate Program, and is a companion course to HPS 0612 (Mind and Medicine) but may be taken independently. The course is of particular interest to pre-medical and pre-health care students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 0616 - ARTIFICIAL INTELLIGENCE AND PHILOSOPHY OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Artificial intelligence has been and still is one of the core disciplines of contemporary cognitive science. It raises fascinating questions: can robots think? Is artificial intelligence really intelligence? Could artifacts be conscious? What can we learn about the human mind from building robots? How should intelligent robots be built? We will survey the main controversies that artificial intelligence has provoked.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 0618 - SCIENTIFIC CONTROVERSIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement

HPS 0620 - SCIENCE AND RELIGION

Minimum Credits: 3
Maximum Credits: 3
Are science and religion at odds or harmonizable? Do they coincide or represent completely separate discourses? This course examines the relationship between science, rationality, faith, and religion. Special attention will be given to ancient creation narratives and their interpretation, historical dialogues regarding faith and reason in the Western monotheist faiths (Christianity, Judaism, Islam), the scientific revolution, and various approaches to evolutionary theory. We will also consider practical, contemporary issues such as neuroscience and religious practice, ecology and faith, and scientific views toward gender and race.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 0621 - PROBLEM SOLVING: HOW SCIENCE WORKS

Minimum Credits: 3
Maximum Credits: 3
This course provides a gentle introduction to quantitative methods in science, showing how these methods are designed to control our natural tendencies to misread nature. It uses the examples of the science of energy and statistics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

HPS 0623 - EXPLANATIONS OF HUMANS AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Scientific explanations for human behavior have tremendous authority. They influence medicine, law, and perhaps most importantly, how we understand ourselves and each other. But what constitutes a good explanation for the behavior of human individuals or social groups? In this course, we will investigate the history and philosophy of scientific explanations of human behavior, loosely interpreted. Drawing from debates in biology, psychology, economics, and epidemiology, we will inquire as to what, if anything, makes these scientific models and explanations true, good, or useful, and for whom. In evaluating explanations, we'll draw on history and philosophy of science, feminist epistemology, and philosophy of language. Students of all intellectual backgrounds are welcome in this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HPS 0626 - DEVELOPMENT OF MODERN BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will consider major episodes in the history of biology in the 19th and 20th centuries. Beginning with the Charles Darwin's theory of evolution and ending with contemporary genomics, we will place the major milestones of modern biology in their wider social, political, and cultural context. Topics may include Darwinism and its controversial reception, eugenics and the control of heredity, experimentation as a hallmark of twentieth century biology, the impact of molecular biology, and the rise of genomics and big data in biology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

HPS 0630 - SCIENCE AND PSEUDOSCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course probes the distinction between genuine and pseudo-science using a number of case studies, including ESP and other paranormal phenomena, scientific creationism, UFO's and extraterrestrial life, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

HPS 0633 - SCIENCE, PHILOSOPHY AND PUBLIC POLICY

Minimum Credits: 3
Maximum Credits: 3
The course studies problems that arise in making public policy decisions. Topics studied include the nature of science, the nature of technology, our system of values, relations between science, values, and technology. Case studies include teaching creation science in public schools, genetic engineering, legislating sexual morality, and other policy issues on which scientific knowledge has some bearing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 0685 - MATHEMATICS AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to the role of mathematical ideas in various cultural settings. It focuses on the use of math in everyday life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

HPS 1501 - ANCIENT SCIENTIFIC ASTRONOMY

Minimum Credits: 3
Maximum Credits: 3
In this course we examine Babylonian and Greek mathematical astronomy and the relationship to Greek and near eastern religions and cosmologies. Transmission to other cultures will be noted.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr

HPS 1508 - CLASSICS IN HISTORY OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Four hundred years ago Galileo Galilei aimed a telescope at the sky. He revolutionized astronomy. Equally revolutionary were his theories and experiments in physics, published in his masterpiece two new sciences. In this course we will learn why Galileo's theories and experiments in physics were revolutionary. We will read Galileo's two new sciences, setting it in the context of the history and philosophy of Western science and civilization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 1510 - SCIENCE IN GLOBAL PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
Science has never been an exclusive practice of any one society or region. In this course we will explore science as a global phenomenon by considering how different practices and traditions of science developed in disparate global contexts, how science travelled and was transformed through global circulation, and how a global and comparative perspective can inform our understandings of science, its history and its philosophy. Regions and time periods considered may vary from offering to offering. Every course offering will include a comparative component which considers how the circulation of materials, texts, technologies, and people have shaped the historical development of science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 1530 - EUROPEAN INTELLECTUAL HISTORY 2 1870-1940

Minimum Credits: 3
Maximum Credits: 3
A course of readings and discussions focused on major texts in the European intellectual tradition from the age of positivism to the second World War. There will be occasion al lectures, especially on the social and institutional contexts, but the predominant emphasis will be on class discussions of primary readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HPS 1531 - MAN AND COSMOS IN THE RENAISSANCE

Minimum Credits: 3
Maximum Credits: 3
An exploration of the intellectual and scientific activity of the European Renaissance and its influence in shaping modern man and the discoveries of modern science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Intensive Course (WRIT)

HPS 1600 - PHILOSOPHY & RISE MODERN SCIENCE

Minimum Credits: 3
Maximum Credits: 3
It is generally agreed that what happened in the 17th century changed the human landscape irrevocably. The religious reformation was consolidated; divinely ordained kingship was decisively uprooted; upheavals across Europe ushered in non-traditional political and constitutional formations; and the forces of transformation forged new sociocultural contexts in which life was lived. Lying at the core of these transformations was the impact of early modern science as it emerged in the 17th century. This course will examine the dynamics of the `scientific revolution' paying close attention to such figures as Kepler, Galileo, Descartes, Hobbes, Leibniz, and Newton. We will be concerned with the philosophical consequences of their thought within the context of their period, but also with the affect it had on the scientific world-picture of the 18th century enlightenment
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr
Course Attributes: Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

HPS 1602 - RACE: HISTORY, BIOLOGY, PSYCHOLOGY, PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
The goal of this course is to help students gain a thorough understanding of the issues raised by races and racism. Such understanding can only be gained by bringing together several disciplines in an interdisciplinary manner. Thus, we will examine issues about race and racism that arise from biology, history, philosophy, and psychology. In particular, we will examine the following questions: Does genetics show that races are real? Why are racial categories used in medicine? Where does the concept of race come from? Is it a recent historical invention? How has it influenced the sciences? What are races? What is racism? Should we be color-blind? How does race contribute to one's identity? Why do we think about races? Are there differences in intelligence between races? What are racial prejudices? The course will involve reading original articles and book extracts from a range of disciplines, including history, philosophy, and several sciences. These articles will be explained and discussed in class.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 1605 - AESTHETICS AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
How does one appreciate painting, literature or music? Is knowing about art useful or, even, necessary? Is beauty in the eye of the beholder? The course deals with psychological and social science attempts to explain human responses to art. Also the question of how art is like and unlike science will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr

HPS 1612 - PHIL OF 20TH CENTURY PHYSICS

Minimum Credits: 3
Maximum Credits: 3
An examination of the fascinating philosophical problems to which modern physical theories have given rise. No previous formal training in physics

or mathematics will be presupposed, since the basic physical ideas needed will be introduced largely qualitatively with an emphasis on concepts rather than equations. Topics will vary from year to year with instructor, but center around classical mechanics, quantum mechanics, and relativity theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr

HPS 1620 - PHILOSOPHY OF BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Philosophy of biology will consider foundational conceptual issues in biology like the nature and structure of biological explanation, the possibility of laws in evolutionary theory, the relationship between different causal components of biological processes (genetics and development), the problem of species reality and classification, the explanatory character of ascription of biological function, and the extension of biological explanations to human psychology and culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 1623 - DEATH AND HEALTHCARE PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
The American culture of the 20th and 21st centuries has been called, not death-defying, but death-denying. It is often said that America is the only place in the world that treats death as optional. Once upon a time, we couldn't have open, public conversations about breast cancer, because the word could not be uttered aloud. In many places, it is just as hard today to have an open, public conversation about death and dying. This phenomenon is not just a social more; it affects the practice of many professions and entire segments of our economy and society. This course will explore our individual and cultural reactions to mortality, the ways in which dying in today's America is different from dying throughout history or elsewhere in the world, and the responses of a variety of professions, both within the field of healthcare and beyond, to their encounters with people in the various stages of dying. Students will be asked, at turns, to be scientific, philosophical, clinical, analytical, and emotional in encountering the concepts and material presented here. This should be a true interdisciplinary experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPS 1624 - DEVELOPMENT OF SCIENTIFIC MEDICINE

Minimum Credits: 3
Maximum Credits: 3
This course will explore the history of contemporary scientific medicine, including its sciences (anatomy, physiology, pathology, epidemiology), technologies (diagnostic, surgical, pharmacologic), research methods (clinical trials, biostatistics), and theories and philosophical underpinnings (naturalism, experimentalism, germ theory, the medical model, evidence-based medicine, genetic determinism). Students will come away with an understanding of how the history of medicine illuminates current medical science/practice as well as major topics in the philosophy of medicine and the philosophy of science. Students will read primary historical sources, original research in history of science, and a history of medicine textbook. Classes will consist in a combination of lecture and discussion.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPS 1625 - PHILOSOPHY OF MEDICINE

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to philosophical and yet practical issues in medical science. Students will examine the concepts of "health", "normality", and "disease", and also some representative theories in clinical biochemistry, microbiology and physiology.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr

HPS 1626 - NEUROETHICS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to ethical, social, and philosophical issues in the neurosciences and brain research. As the American Medical Association has noted, "The rapidly evolving field of neuroethics ethical issues involving neurologic and psychiatric conditions" is concerned with the great promise of newer technologies as well as the ethical questions that they will pose about autonomy, privacy, the definition of "normal" and the nature of individuality. The topics to be covered include (1) neurological and brain enhancement, (2) ethical and policy issues related to neuroimaging, (3) mind control and "mindreading", (4) free will and responsibility, (5) criminal culpability and "dangerous brains", and (6) neurodevelopment and the emergence of personhood and the self. There are no prerequisites for this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 1627 - LIVING WITH TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
A prominent company recently realized the machine-learning algorithm trained on its past hiring data had learned a bias against female candidates and so was unsuitable for resume evaluation. But given competing definitions of fairness, how should we decide what it means for an algorithm to be unbiased? Machine vision algorithms are systematically less likely to recognize faces of people of color. Since many face recognition algorithms are used for surveillance, would improving these algorithms promote justice? Deep fakes may pose serious challenges to democratic discourse, as faked videos of political leaders making incendiary statements cast doubt on the provenance of real videos. Do the researchers developing these algorithms, often academics funded by National Science Foundation grants, have an obligation to desist? In a field filled with such vexing questions, the ethical issue most commonly addressed by the media is whether a self-driving car should swerve to hit one person to avoid hitting two. In this class, we will go beyond the headlines to explore the ethics of technology. We will discuss issues such as transparency, bias and fairness, surveillance, automation and work, the politics of artifacts, the epistemology of deep fakes, and more. By the end of the course, students will be able to identify crucial moral and epistemic issues in contemporary technology and choose between solutions to these difficult problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 1630 - MUSIC, CULTURE AND TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
In this course, we will explore the history of sound reproduction technology from the end of the nineteenth century into the present day, analyzing the way sonic technologies have shaped the creation, consumption, and social politics of music in North America. This is not a course about how to make sonic technology, or how to use it; instead, it engages with sound reproduction technology as a social, historical, and cultural artifact. Although the course is roughly chronological, it is not comprehensive the purpose is not to learn a single, continuous history of audio technology. We will be exploring various perspectives from more than a century of historical and technological change, moving from the use of sound in 19th-century laboratories to the culture of the iPod. By thinking critically about technology's broader social and intellectual contexts, this class sheds light on the historical and material stakes of sonic technology for listeners in the 21st Century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HPS 1632 - EINSTEIN FOR ALMOST EVERYONE

Minimum Credits: 3
Maximum Credits: 3
The course will survey Einstein's contributions to physics. This survey will include the contributions of his annus mirabilis of 1905: special relativity, Brownian motion, light quantum; a briefer contact with his work in general relativity and cosmology; and his now celebrated critique of quantum theory. The course content will be organized around modules, corresponding to the above material. It will cover technical details of Einstein's work, so some technical competence is essential. A cumulative GPA of 3.25 and completion of MATH 0220 prerequisites.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0220
Course Attributes: University Honors Course

HPS 1640 - SCIENCE, PHILOSOPHY AND THE SENSES

Minimum Credits: 3
Maximum Credits: 3
Our senses are our only means of obtaining knowledge of the world around us. For this reason, they have long been a subject of philosophical enquiry, concerned with the nature of perceptual knowledge. Alongside philosophical investigation, the perceptual modalities (vision, hearing, etc.) Are a central area of experimental research in psychology and neuroscience? Philosophers of perception now seek to integrate their conceptual understanding of the topic with empirical results coming from these sciences. In this course, we will examine debates in contemporary philosophy of perception over the nature of perceptual awareness and sensory knowledge, looking especially at ideas that have been influenced by scientific discoveries. Topics include: nave realism and representationalism; ontology of perceptible qualities (the existence of colour, sound, smell, etc.); the nature of attention and introspection.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HPS 1653 - INTRO TO PHILOSOPHY OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course provides a broad, introductory survey of current issues in philosophy of science and treats philosophical problems such as confirmation, which are common to all sciences, as well as problems peculiar to individual sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr

HPS 1654 - FEMINIST PHILOSOPHY OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
If there is a legitimate role for political values in scientific knowledge production, why should those values be feminist? In this course, we will explore the ways that feminist epistemologists and philosophers of science have characterized a positive role for feminist values in scientific theory and practice. We will ask what this means for traditional accounts of science as objective and value-free, and consider possible consequences of feminist arguments for how science ought to be done, and by whom. In particular, we'll examine feminist critiques of essentialism, biological determinism, and reductionism in science, using examples from sex differences research. We'll then consider how political values might play a role in so-called ``good science," focusing on underdetermination and the argument from inductive risk. We will examine arguments about the particular role(s) of feminist values in science by attending to the traditions of feminist empiricism and feminist standpoint theory. We will evaluate the consequences of these arguments for concepts of objectivity, for the structure of scientific communities, and for the authority and trustworthiness of scientific explanation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 1660 - PARADOX

Minimum Credits: 3
Maximum Credits: 3
This course explores paradoxes both for the fun of untangling an intriguing puzzle and for the more serious reason of the easy access they provide to some of the most important foundations issues in philosophy and the sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr

HPS 1670 - PHILOSOPHY OF NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
How can neuroscience explain my subjective experiences? How are the mind and brain connected? Do neuroscience and psychology even relate? Is there a problem of consciousness? Can we read minds? These are some of the questions now occupying the minds of both philosophers of neuroscience and many neuroscientists. However, approaching such questions empirically does not reveal the underlying assumptions one might incorporate into one's thinking when formulating questions, developing experiments, and interpreting results. This course will couple metaphysical

theories of mind with contemporary research in both cognitive neuroscience and neurobiology. Throughout the class, we will try to answer some of the questions that popularly occupy contemporary philosophy of neuroscience debates, as well as interrogate and identify, philosophically, where and how these questions, including the research they prompt, arose in the first place. Finally, as neuroscience is a largely tool-driven discipline, students will learn about a range of neurotechnologies and explore whether or not these technologies are likely to get us any closer to reading the mind from the brain. Background in neuroscience is not required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HPS 1682 - FREEDOM AND DETERMINISM

Minimum Credits: 3
Maximum Credits: 3
This course analyzes three concepts of determinism--theological determinism, logical determinism or fatalism, and physical determinism--and examines the various philosophical arguments designed either to show that determinism and free will do clash or alternatively that they are reconcilable.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: Jr, So, or Sr
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

HPS 1690 - TOPICS IN PHILOSOPHY OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Discussion, at the advanced undergraduate level, of selected problems such as confirmation, concept formation, the nature of theories. In any given term, the course might focus on problems in physical, biological, or social sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr; PLAN: History and Phil of Science (BA)

HPS 1702 - JR/SR SEMINAR FOR HPS MAJORS

Minimum Credits: 3
Maximum Credits: 3
The goal of this seminar (HPS 1702) will be to introduce you to the cutting-edge research in history and philosophy of science. The seminar is designed to complement the knowledge you have acquired about the classic debates in history and philosophy of science. We will focus on the recent debates in contemporary philosophy of science and on some debates in the history of science that are relevant for philosophy. We will read articles that have been published in the last ten years in the major philosophy of science and history of science journals. We will also read some classic papers that provide a background for the current debates.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (HPS 0427 or 0430 or 0515) and (HPS 0611 or PHIL 0500) and HPS 1653; CREQ: HPS 1703; LVL: Jr or Sr; PLAN: History and Philosophy of Science (BA)
Course Attributes: Capstone Course, Medieval & Renaissance Studies

HPS 1703 - WRITING WORKSHOP FOR HPS MAJORS

Minimum Credits: 1
Maximum Credits: 1
This writing workshop is designed to introduce HPS majors to the methods and standards of good scholarly writing in history and philosophy of science. It will be offered to HPS majors only in conjunction with HPS 1702, Jr./Sr. seminar. Evaluation will be based on two short papers that will be rewritten on the basis of the instructor's comments. Must be an HPS major in junior or senior year.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: (HPS 0427, 0430 or 0515) & (HPS 0611 or PHIL 0500) & HPS 1653 &ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006); CREQ: HPS 1702; LVL: Jr or Sr; PLAN: HPS (BA)
Course Attributes: Capstone Course, Writing Requirement Course

HPS 1800 - SPEC TOPICS HIST & PHIL OF SCI

Minimum Credits: 3
Maximum Credits: 3
A major topic in history and philosophy of science will be developed in this course. The student will acquire an understanding of the topic and its significance in the field. The special topic covered will vary.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr
Course Attributes: University Honors Course

HPS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
This is an opportunity for a student and instructor to determine a topic in history and/or philosophy of science which is of special interest.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: So, Jr, or Sr; PLAN: History and Philosophy of Science (BA)

History of Art & Architecture

HAA 0010 - INTRODUCTION TO WORLD ART

Minimum Credits: 3
Maximum Credits: 3
This course explores the question `what is art through a close analysis of select art works from around the globe, introducing students to the types of questions art historians bring to the images, objects and sites human beings have taken particular care to craft and conceptualize. What role has art played in a diverse range of human cultures across time?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 0018 - DEATH IN THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
The death of a loved one is an emotional and powerful occurrence that provokes a variety of human responses. In addition to writings describing their funerary practices, the civilizations of the ancient Mediterranean region have left artistic representations of death and dying, built tombs, and objects associated with funerary rituals. The study of these texts, images, structures, and objects allows us to better understand ancient attitudes and reactions to death. This undergraduate lecture focuses on the visual and material evidence of funerary practices and beliefs in ancient Egyptian, Greek, and Roman societies. The subject will be approached thematically. First, we will explore how archaeologists discover death-related artifacts and how scholars approach the study and reconstruction of ancient death rituals. Ancient practices and beliefs regarding the mummification, the funeral, commemorative strategies, visits to the grave, and the afterlife will be explored, and images found on specific media (vases, sculpture, built tombs, paintings) will be discussed in depth. The course will conclude with discussions of the roles that sensational topics, like fear of the undead (zombies, vampires, and ghosts) and spectacles of death (gladiatorial contests and public executions), played in ancient Mediterranean civilizations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0020 - INTRODUCTION TO ASIAN ART

Minimum Credits: 3
Maximum Credits: 3
This base level survey is meant, on the one hand, to introduce the student to the arts of Japan, China, and India and on the other, to teach some

fundamental techniques of visual analysis. The course considers the development of Chinese bronzes, Chinese Buddhist sculpture, Indian Hindu and Buddhist sculptures, and Japanese temples, sculptures, and paintings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0030 - INTRODUCTION TO MODERN ART

Minimum Credits: 3
Maximum Credits: 3
The course will present a chronological survey of Western European, Russian, and American art from the mid-nineteenth century to the present (impressionism to post-modernism). In addition to charting the dramatic stylistic and conceptual changes in art during this time period, the course will consider the historical circumstances which caused a disintegration in accepted notions of what constituted a significant work of art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HAA 0040 - INTRODUCTION TO WESTERN ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
Introduces students to the conscious observation and analysis of architecture and to a broad survey of the major masterpieces of architecture in Western civilization. Formative concepts behind the designs, structural principles involved in the construction, and societal values promoted and reinforced by the formal character of buildings will be considered along with the analysis of style. Required for the architectural studies major and recommended as a beginning course for others interested in architecture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Architectural Studies, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 0050 - INTRODUCTION TO MEDIEVAL ART

Minimum Credits: 3
Maximum Credits: 3
A survey of the architecture, painting, sculpture and minor arts of the medieval world from ca. 300 To ca. 1450 With the emphasis on visual analysis of period styles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 0060 - MASTRPIECES OF WESTERN PAINTNG

Minimum Credits: 3
Maximum Credits: 3
This course will help students with no experience in the arts feel comfortable when they visit a museum or discuss paintings, upon completing this course a student should not only have an easy familiarity with some of the greatest masterpieces of European and American painting, but he or she should also have attained the background and skill to understand and to discuss paintings they might discover in a gallery, antique shop or home. This course is especially intended for students without background in the arts.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0061 - INTRODUCTION TO PAINTINGS

Minimum Credits: 3
Maximum Credits: 3
This course will help students with no experience in the arts feel comfortable when they visit a museum or discuss paintings. Upon completion of this course a student should not only have an easy familiarity with some of the greatest masterpieces of painting, but he or she should also have attained the background and skill to understand and to discuss paintings they might discover, in a gallery, antique shop or home. This course is especially intended for students without a background in the arts.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0070 - ART OF EUROPE

Minimum Credits: 3
Maximum Credits: 3
An introduction to European art and architecture from the early Renaissance to the present. The course will also include American works from the 18th century onwards.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 0090 - INTRODUCTION TO CONTEMPORARY ART

Minimum Credits: 3
Maximum Credits: 3
This course explores the latest developments in contemporary art in the context of changes in world visual cultures since the 1960s. The first weeks will concentrate on the transformations of artistic practice that occurred initially in pop art, and on the minimal-conceptual shift in Western art. This will be followed by a survey of the diversification of artistic practice in the 1980s and 1990s, including the emergence of new internationalisms reflecting postcoloniality, global contemporary art and digital media.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS The Arts General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0101 - FOUNDATIONS OF ART HISTORY

Minimum Credits: 3
Maximum Credits: 3
Foundations of Art History is a core course for the HAA major and offers an introduction to the history of the art historical discipline and its research and interpretive methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HAA 0102 - PROSEMINAR FOR UNDERGRADUATE MAJORS

Minimum Credits: 1
Maximum Credits: 1
This is professional development workshop that assists students with resume development, networking, and establishing and meeting career goals.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

HAA 0105 - ART AND EMPIRE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0125 - MUSEUMS: SOCIETY AND INCLUSION?

Minimum Credits: 3
Maximum Credits: 3
What are museums? Who are museums for? This course prompts students to contemplate the role of the museum in society as a public institution. What publics do they serve? How do they generate civic identity and cosmopolitanism? How do they advance learning and spark curiosity? Simultaneously, this course also focuses intensively and purposefully on the historical dependency between the modern institution and forces of colonialism and imperialism, on contested claims of ownership and representation (cultural property and agency), and ethical questions that contemporary museums face (access and inclusion). The course will address the function of the museum in relationship to its collecting practices and its publics in the past and present, and examine innovative initiatives, projects, methods and structures that are being designed to advocate for greater inclusion and equity. Students will not only learn that museums were shaped by and in turn shaped uneven power relationships and inequity, but will also consider how museums might serve and speak with diverse communities more productively in the future.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0150 - ANCIENT ART

Minimum Credits: 3
Maximum Credits: 3
The Mediterranean Sea is a lake and its shores have produced many important cultures and artistic traditions. The course will survey the artistic and cultural traditions of Mesopotamia, Egypt, and the Aegean, from the Neolithic to the end of the Bronze Age (ca. 6000-1200 BCE), a formative period for the cultures that developed in these regions. Special attention will be paid to: 1) the relationship between the artistic traditions of these areas and the societies which produced them, and 2) the way in which influences from one culture were transformed by another.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 0160 - ANCIENT EMPIRES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HAA 0165 - GODS AND KINGS: ART IN ANCIENT MESOPOTAMIA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HAA 0220 - THE MEDIEVAL BOOK

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0302 - RENAISSANCE ART

Minimum Credits: 3
Maximum Credits: 3
We will explore the arts - painting, sculpture, architecture, and the decorative arts - that flourished in Italy between 1250 and 1590. The renaissance is one of the great epochs of western culture; this course offers an introduction to the visual evidence that reveals the development of new attitudes about human life and its meaning. Emphasis will be on works of those revolutionary individuals who transformed the arts - Giotto, Donatello, Brunelleschi, Michelangelo, Leonardo, Raphael, Bellini, titian, and Palladio, to name only the most important.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 0303 - LANDSCAPE PAINTING, 1500-1700

Minimum Credits: 3
Maximum Credits: 3
This course will study the history of landscape painting in the centuries when it finally emerged as a recognized genre capable of artistic achievements as great as those hitherto reserved for history painters. The cultural context from which landscape painting emerged in Antwerp, Regensburg, and Venice in the early 16th century, its early Renaissance precedents, its ambiguous status in Renaissance art theory will be examined. The role of Patenir, Giorgione, Altdorfer, Titian, Elsheimer, Rubens, Jan van Goyen, Ruisdael, Claude and Poussin will be emphasized.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0320 - SPECIAL TOPICS-NORTHERN EUROPEAN

Minimum Credits: 3
Maximum Credits: 3
Special topics in European art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0350 - BAROQUE ART

Minimum Credits: 3
Maximum Credits: 3
This course will consider the careers of the major painters and sculptors of Italy (Caravaggio, the Carracci, Bernini, Cortona, Gaulli), Spain (Ribera, Zurbaran, Velazquez, Montanes, Murillo), France (G. De la Tour, P. De Champaigne, Poussin, Claude, le Brun, Puget), Flanders (Rubens, van Dyck, Jordaens) and Holland (Hals, Rembrandt, Vermeer, Ruisdael) in the 17thC. It will also consider definitions of the term "baroque" in relation to the history of taste and later responses to 17thC artistic achievement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 0370 - REMBRANDT

Minimum Credits: 3
Maximum Credits: 3
This core level art history course, intended for a beginning student with no background in art history (but also open to devotees and majors), offers an introduction to Rembrandt by an intensive examination of his life, and his art; paintings, drawings, and etchings. The course is arranged chronologically, so that as the term proceeds we follow Rembrandt from his earliest training and his fascination with baroque dynamism through his greatest success as Amsterdam's most popular portraitist to his moving and universal final works.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0380 - ART OF THE SPANISH WORLD: RELIGION, IDENTITY & THE ART OF ACCOMMODATION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0402 - WOMEN ARTISTS, 1550-1800

Minimum Credits: 3
Maximum Credits: 3
This course will focus on women artists from the late renaissance, when they first emerged and achieved some success, to the present. The social context in which women artists functioned and the roles played by the most successful women of each century in opening opportunities for the succeeding generation will be considered. Sofonisba Anguissola, Artemisia Gentileschi, Elisabetta Sirani, Judith Leyster, Rachel Ruysch, Rosalba Carriera, Angelica Kauffman, e\E. Vigee Lebrun, Rosa Bonheur, Mary Cassatt, Berthe Morisot and many 20thC women artists will be covered.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0420 - VAN GOGH

Minimum Credits: 3
Maximum Credits: 3
This introductory course will study one major artist as a means of approaching the methodology of art history. The major periods of his career will be presented in the context of European art of the nineteenth century, particularly impressionism and post-impressionism.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

HAA 0425 - DIGITAL HUMANITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HAA 0460 - ART IN PUBLIC: INCLUSION , IDENTITY, AND ACTIVISM

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the social, political, and artistic issues surrounding the creation and interpretation of public monuments and public art. We will focus on our local urban environment, particularly the rich collection of works in and around Oakland, but we will also put these local works in larger national and global contexts. The course emphasizes hands-on learning, through multiple site visits, encounters with the works of art in their real urban contexts, and individual and group exercises building on these encounters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0470 - PHOTOGRAPHY AND ART

Minimum Credits: 3
Maximum Credits: 3
This introductory course is intended to provide a thorough familiarity with the history of photography from its development in the 19th century to the present day, and to link that history to major trends in the history of modern art, such as realism, impressionism, cubism, surrealism, abstract art, etc.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HAA 0501 - AMERICAN ART

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to American painting, sculpture, and architecture, with an emphasis on painting, from the colonial period to the post-World War II era. Students will also learn the vocabulary of visual analysis and become familiar with the scope of art historical methodology. Students should leave the class with a broad understanding of the contexts in which American artists worked, a fund of information about artists and monuments of art in the American heritage, skills in visual analysis, and the capability to focus several types of critical questions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0510 - PITTSBURGH ARCHITEC/URBANISM

Minimum Credits: 3
Maximum Credits: 3
The course studies the physical environment of Pittsburgh; the topography, early settlement, the expansion of its industrial center, the post-war renewal, and the current shift from production to a service-based economy. A parallel study in the architectural history of Pittsburgh focuses on images of individual buildings from fort Pitt to the new skyscrapers. Student papers will integrate an analysis of a Pittsburgh building with an analysis of the neighborhood around it.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0520 - ART AND POLITICS IN MODERN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course examines artistic developments in modern Latin America in relation to broader political forces. Latin America offers rich opportunities to study cases of artists and architects who worked in the service of governmental regimes during the twentieth century, such as Diego Rivera in Mexico and Oscar Niemeyer in Brazil. At the same time, we will consider historical moments in which artists employed their artworks to challenge or subvert political repression, as occurred in Ecuador in the 1930s and in Chile during the dictatorship of Augusto Pinochet. Beyond politics, this course focuses on the tensions indigenous vs. cosmopolitan, urban vs. rural, rich vs. poor, and the international dialogues that have informed the production and reception of art and architecture in Latin America from the age of independence to the present day.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HAA 0620 - ART OF CHINA

Minimum Credits: 3
Maximum Credits: 3
One way of learning about the cultural history of china is to look at the visual arts produced there. This course offers a chance to examine both traditional and modern expressions. Such topics as Neolithic pottery, bronze art of the first dynastic period (Shang and Chou), tomb sculpture and burial practices, Buddhism and the state, landscape painting and attitudes toward nature, poster art and crafts in new china will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0640 - ART OF JAPAN

Minimum Credits: 3
Maximum Credits: 3
This course introduces the visual arts of Japan, prehistory to the 19th century, focusing on selected works of painting, sculpture, architecture, and gardens under the broader themes of patronage, Buddhist worship and practice, and function.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 0730 - ART AND ARCHITECTURE OF THE MUSLIM WORLD

Minimum Credits: 3
Maximum Credits: 3
This course examines the art and architecture of the Muslim world as it developed through centuries of adoption, adaptation, and innovation which emerged as Islam spread throughout Eurasia, and Muslim communities came into contact with other Muslim and non-Muslim societies. Focusing on a number of prominent sites, buildings, and art objects, this course introduces students to the plurality of traditions and artistic practices labeled as Islamic Art and Architecture. Furthermore, students will learn about various sources of influence that came from the center and peripheries of the Muslim world. Exploring these concepts will take the class on a journey through time and space: starting in the 7th-century from the birthplace of Islam in the Arabian Desert, we will move through a vast territory that expands from southern Spain to China, with a final stop in 21st-century Dubai. All along the way, buildings and art objects will serve as snapshots that open a window into the social, cultural, economic, and political life of these Muslim societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 0810 - EXPERIMENTAL CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course examines the development of experimental cinema beginning in Europe in the 1920s with dada and surrealist films by Marcel Duchamp, Luis Bunuel and others, and continuing in the U.S. and elsewhere after World War II. The films, many of which are non-narrative and some of which are "abstract", will be examined for the ways in which cinema is used for the filmmakersâ?? personal expression. Consideration will be given to the artistic and cultural contexts in which the films were made, and comparisons will be made with other media, especially painting and sculpture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0860 - INTRODUCTION TO PUBLIC HISTORY

Minimum Credits: 3
Maximum Credits: 3
The course will introduce students to the theory, methodology, and practice of Public History. Public History is the employment of professional historical methods by public and private agencies to engage communities in shaping the presentation of the past into usable histories. Through the course, students will be able to analyze how Public historians and the Public collaborate to explain individual and collective human behavior through a variety of methods, mediums, and contexts. Moreover, students will learn how Public Historians and the Public create and express historical meaning for their local, state, national, and global communities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Phil. Think or Ethics General Ed. Requirement

HAA 0870 - ARTS ADMINISTRATION: THE CREATIVE INDUSTRIES IN A DIGITAL WORLD

Minimum Credits: 3
Maximum Credits: 3
This course is offered through the Pitt in London program and focuses on the ways in which the Creative Industries are structured, and how arts administrators successfully share creativity with the public and leverage the commercial opportunities of creative production.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 0900 - SPECIAL TOPICS-ARCHITECTURAL STUDIES

Minimum Credits: 3
Maximum Credits: 3
Special topics in architectural studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1000 - SPECIAL TOPICS: ART HISTORY 1

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1001 - SPECIAL TOPIC: ART HISTORY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1009 - RESEARCH SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course was developed to expand the capstone research experience of undergraduate students in the History of Art and Architecture department. It is conceived as a supplement to HAA 1010: approaches to art history, which is the official writing seminar required of all HAA majors. It provides faculty with the opportunity to teach one of their topics courses or a newly developed course to fewer students in a given semester, and mentor these students through a more significant research experience than is typically possible in a regular lecture-based class.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1010 - APPROACHES TO ART HISTORY

Minimum Credits: 3
Maximum Credits: 3
HAA 1010 is the capstone research seminar required of all HAA majors and is an official w-course. Students in this class will conduct extensive readings on a special topic devised by the course instructor. Each student in the class will be required to produce a substantive research paper under the guidance of the instructor. Students will work to master the skills that are fundamental to the discipline and broader arts related professions: critical thinking, research, and written and oral communication.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: History of Arts and Architecture (BA) or Architectural Studies (BA); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Medieval & Renaissance Studies, West European Studies, Writing Requirement Course

HAA 1019 - CURATORIAL DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This museum studies course draws on the University Art Gallery collection to develop an exhibition that will be realized in the Fall by students in the Exhibition Presentation Seminar. Within a defined thematic or collection-area focus, students will survey the holdings of the gallery to develop an exhibition concept and conduct in-depth research into a single work of art to contribute to a catalogue for the exhibition. Students will explore the key texts related to the subject of the exhibition and identify potential loans to complement its storyline.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1020 - EXHIBITION DEVELOPMENT

Minimum Credits: 4
Maximum Credits: 4
This course teaches museum practice through practical experience with the permanent collection and with special exhibitions. Students will help in all aspects of exhibitions, from writing labels and/or catalogue copy, deciding how to best display the works, participating in the actual installation of exhibitions and planning related events such as tours.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

HAA 1021 - INSIDE THE MUSEUM

Minimum Credits: 3
Maximum Credits: 3
This course will enable students, particularly those who are pursuing the Museum Studies Minor, to gain behind-the-scenes knowledge of museum practices with sessions taught on location at the various Carnegie Museums of Pittsburgh. The course will provide students interested in museum careers with a rich variety of hands-on, practical, and experience-based learning in addition to theoretical exploration and connect students to professionals working in these institutions. Specific topics will vary depending on the opportunities provided by initiatives and projects that are underway at the time the class is offered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1022 - EXHIBITION PRESENTATION

Minimum Credits: 3
Maximum Credits: 3
This course teaches museum practice through practical experience with the permanent collection and with special exhibitions. Students will help in all aspects of exhibitions, from writing labels and/or catalogue copy, deciding how to best display the works, participating in the actual installation of exhibitions and planning related events such as tours.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1025 - HISTORY AND ETHICS OF COLLECTING

Minimum Credits: 3
Maximum Credits: 3
This course will critically examine the history of public and private collecting practices, the cultural and scholarly rationales behind collecting, and the legal and ethical challenges that collections face. Case studies will include the british museum and the louvre, Pittsburgh's private collectors frick and mellon, the fate of art in Europe during World War II, the antiquities trade, and ethnographic collections. Using these and other examples, we will evaluate the arguments for and against universal art museums, the repatriation of works to source nations or original owners, and the protection of cultural heritage during times of conflict.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1026 - EXHIBITIONS: FROM WORLD'S FAIRS TO GLOBAL BIENNIALS

Minimum Credits: 3
Maximum Credits: 3
This course surveys the Western origins of museums, world's fairs, and biennials in the 19th century and traces the increasingly global development of exhibitions of visual and material culture up through the present day. Our focus in this long and varied history will be on those shows that have sought, not without controversy, to shape viewers' knowledge of the past, while also structuring their sense of self and relationship to others in national, international, universal, and/or global terms. We'll critically assess the motivations behind these exhibitions and the changing "world picture" each presented in relation to modernizing and globalizing tendencies of the past two centuries. We'll also take a close look not only at what these shows presented, but also how and for what purpose(s) our chosen exhibitions were organized. Whose worldview, ideology, and/or political interests did they serve? How in each case did the very arrangement of objects and the physical context of their presentation seek to articulate those

interests? What sort of public did they envision and attempt to create? We'll also address how and to what extent the achievements and shortcomings of earlier exhibitions have informed the character of subsequent shows down to today. Throughout the course, we'll measure our understanding of this history against local examples of Pittsburgh's rich and extensive museum culture. Written assignments will involve students in exploring these and other local installations as we assess what role museums can and should continue to play in fostering understanding of ourselves and others now and into the future.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1030 - SPECIAL TOPICS- MUSEUM HISTORIES

Minimum Credits: 1
Maximum Credits: 3
This course will discuss specific subjects in museum studies.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

HAA 1031 - SPECIAL TOPICS: MUSEUM PRACTICES

Minimum Credits: 1
Maximum Credits: 3
This course will discuss specific subjects in museum studies.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

HAA 1050 - WORLD ART:CONTACT AND CONFLICT

Minimum Credits: 3
Maximum Credits: 3
This course, an advanced undergraduate seminar, is a counterpart to the introductory core course Introduction to World Art and invites students to think more critically about 'World Art' as a disciplinary enterprise as it emerged in the last several decades with the global turn, post-colonialism, and a call for art history to be more inclusive. Students will be introduced to key terms that are employed by this discourse (contact zones, planetarity, world-picturing, cosmopolitanism). The course works through these ideas by focusing its attention on specific sites and art objects, case studies that explicitly circulate within or take as their subject the meeting point of different cultures and groups. First and foremost, this course regards `the contact zone' as a messy and complicated place. To inhabit the earth as a human being, people encounter, perceive, collaborate with and often resist others. Through the spaces and material objects humans create, boundaries are established and individuals and communities are defined and circumscribed. Art objects and constructed spaces not only arise from but define the contact point of individuals or groups occupying different worlds. By studying these works as a space of encounter, students will learn that boundaries between people are porous, with cultural contact a zone of potentially productive collaboration but also power inequity and strife. How do works of art and built spaces incite, mediate, or instantiate such strife? How have people traditionally perceived to reside at the periphery employed artistic expression or rhetorical strategies to subvert existing power structures (the center) and formulate identity? Students who have taken the HAA 0010 Introductory version of this course are encouraged to take this more advanced version, but it is not necessary to have had HAA 0010 to enroll in HAA 1050
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 1100 - SPECIAL TOPICS-ANCIENT

Minimum Credits: 3
Maximum Credits: 3
Special topics in ancient art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1103 - RELIGIONS OF ANCIENT EGYPT

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to ancient Egyptian religious thought and practices with its massive temples, multitude of gods and goddesses, and fascinating funeral rites. The course includes a group project to design a hypothetical Egyptian exhibit for a museum and sessions at the Carnegie museum of natural history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 1105 - JERUSALEM HISTORY AND IMAGINATION

Minimum Credits: 3
Maximum Credits: 3
Jerusalem was and remains both a magnet for cultic devotion and an epicenter of religious conflict. This course examines the political, religious, and cultural history of Jerusalem, focusing primarily on Jerusalem as a concrete and conceptual phenomenon in the premodern period. Beginning our story in the bronze age, we will explore a wide range of sources-literary, archaeological, and iconographical-that bear witness to the remarkable transformation of a small, backwater village in the hills of Canaan to a sacred center for millions of Jews, Christians, and Muslims today. We will study the political, physical, and conceptual development of this urban space through its multiple destructions and reconstructions, considering the emergence of Jerusalem as a sacred space, an apocalyptic space, and a contested space.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HAA 1110 - GREEK ART

Minimum Credits: 3
Maximum Credits: 3
The study of Greek art begins ca. 3000 B.C. In the so-called "age of bronze" and traditionally ends in 30 B.C. With the completion of the Roman conquest of the eastern Mediterranean. The course will trace the development of architecture, sculpture and painting in mainland Greece and to a lesser extent in the Greek colonies of Asia minor and Italy, emphasizing the changes in style and taste which took place over this period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 1130 - ROMAN ART

Minimum Credits: 3
Maximum Credits: 3
Roman art served as the funnel through which the principles of Greek art passed into European culture, but the principles were transformed in the process of transmission. The course will trace the beginnings and subsequent development of the arts of painting, sculpture, and architecture in Italy from the period of the kings to the middle years of the empire (ca. 150 A.D.).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

HAA 1210 - MEDIEVAL ICONOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
This course examines the major themes of the art of the middle ages, including subject matter from the old and new testaments, biblical commentary and exegesis, from the classical tradition, and from the vernacular literature of the period.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

HAA 1212 - PALAEOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the history of hand writing in the West from antiquity through the sixteenth century and a practical introduction to reading the scripts of the period.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1230 - PAGANS AND CHRISTIANS: THE EARLY MIDDLE AGES

Minimum Credits: 3
Maximum Credits: 3
This course examines the art of the early middle ages, paying particular attention to the slow disintegration of the Roman empire, the rapid rise of Christianity, and the evolving identity of Europe and the Mediterranean in a period of migration, crisis, and transformation. Special attention will be paid to the roles played by emperors and kings in this period, including Constantine, Justinian, Clovis and Charlemagne, and the peculiar blend of pagan and Christian cultures that defined early medieval art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1235 - ENGLISH MEDIEVAL ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
This course treats selected examples of English medieval architecture from the seventh through the fifteenth centuries. While attention will be given to fortification and residential structures, emphasis will be placed on ecclesiastical buildings. Discussion will be directed to rationale of plan (particularly liturgical requirements), structural formulation, and style, in the light of historical context.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

HAA 1240 - ROMANS AFTER ROME

Minimum Credits: 3
Maximum Credits: 3
Romanesque architecture, evolving from the building practices of about A.D. 800 In the Carolingian empire, marks the coming of age of European culture in the post-antique era. Most of what survives was ecclesiastical in purpose and consists predominantly of monastery churches and their claustral structures. This course will treat both formal and functional issues in the development of the Romanesque tradition and will emphasize the mature period, 1050-1140.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

HAA 1255 - GOTHIC ART

Minimum Credits: 3
Maximum Credits: 3
The survey of the architecture, painting and sculpture of the period circa 1140 to 1500 with an emphasis on French art and its influence in the rest of Europe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

HAA 1258 - ITALIAN GOTHIC ART

Minimum Credits: 3
Maximum Credits: 3
This course, which might well be sub-titled the beginnings of the Renaissance in Italy, will explore the painting and sculpture created in Tuscany between about 1250 and 1400. What makes this period so exciting is that this is the moment when art begins to be more closely related to the realities of life. Artists begin to represent not only physical reality, but emotional and psychological reality as well, and slowly one moves toward the great rebirth which the Italians of the fifteenth century dubbed the renaissance.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1300 - SPECIAL TOPICS-RENAISSANCE

Minimum Credits: 3
Maximum Credits: 3
Special topics in Renaissance art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1303 - ITAL RENAISSANCE PORTRAITURE

Minimum Credits: 3
Maximum Credits: 3
Topics in Italian Renaissance portraiture.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1304 - LEONARDO, MICHELANGELO AND RAPHAEL: PAINTING IN 16TH-C ITALY

Minimum Credits: 3
Maximum Credits: 3
This course will cover painting and sculpture in Italy from 1480 to 1580, emphasizing major figures (Leonardo, Raphael, Michelangelo, Giorgione, titian, Veronese, Andrea del Sarto, Salviato, Vasari) and consider relevant art theory and historiography (High Renaissance, Maneria and Mannerism).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1305 - EARLY RENAISSANCE ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
The early Renaissance (1420-1500) marked a fundamental change in the way mankind saw and thought about the world. This course examines the buildings, cities, projects, and theories of that period through its major designers. It concentrates on the new acceptance of rationality and modular linkage in building, which prefigures the rationality and scientific method so characteristic of the modern world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

HAA 1307 - PAINTING IN 17TH CNTUR HOLLAND

Minimum Credits: 3
Maximum Credits: 3
This course will focus on key figures such as Frans Hals, Rembrandt, Vermeer, and Jacob van Ruisdael, and will also examine the development of portraiture, landscape, and genre painting. Though the primary concern will be with painting, drawings and prints will also be introduced when relevant. The historical and social context for the "golden age" of Dutch art will also be discussed.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

HAA 1400 - SPECIAL TOPICS-MODERN

Minimum Credits: 3
Maximum Credits: 3
Special topics in modern art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

HAA 1408 - CLASSICAL TRAD IN ARCHITECTURE

Minimum Credits: 3
Maximum Credits: 3
This course deals with classical Greek architecture and the subsequent reinterpretations of that tradition in Western culture, in the Roman, renaissance, and neo-classical eras. The course will explore the significance of the classical aesthetic qualities of order, harmony, symmetry and rational proportion in a variety of cultural climates and the changing roles which the classical order has played in projecting the meaning of a building.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1411 - MODERNISM

Minimum Credits: 3
Maximum Credits: 3
Something happened in the history of art around the time of Manet which set painting upon a new course. This change has been described as a kind of skepticism or uncertainty about the nature of representation in art, characterized by an attention to the material means by which illusions and likenesses are made. This course will examine several monuments in the history of modernism, in an attempt to define the political ambitions of modernism and to confront the issue of whether modernism has become simply an aesthetic or is still a viable artistic strategy in the "post-modern" era.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1440 - EXPRESSIONISM

Minimum Credits: 3
Maximum Credits: 3
A history of the development of modernist art in Germany from the founding of the "bridge" group in 1905 to the "death" of German expressionism in 1920. Although primarily focused on the art of the "bridge" and "blue rider" groups, the course will also situate this art within the broader context of German art production during these years (academic art, jugendstil, secession, dada).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 1450 - ART AND POLITICS IN THE WEIMAR REPUBLIC

Minimum Credits: 3
Maximum Credits: 3
The course will examine art and architecture in Germany from the end of World War I to the rise of the national socialist dictatorship in 1933. Emphasis will be on a chronological study of the ways in which art developed in Germany under democratic social concepts and a new internationalist outlook in the early years of the republic, and the ways art became embedded in the political structures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

HAA 1455 - ART IN THE THIRD REICH AND MEMORIALIZATIONS OF THE HOLOCAUST

Minimum Credits: 3
Maximum Credits: 3
This course examines national socialist art and the fate of modernism under Hitler in the years between 1933 and 1945. As we will explore, Hitler's regime enlisted the arts and architecture, through party rallies, art exhibitions, building programs, and film, in enforcing its dictatorial policies on everything from the extermination of the Jews to sexuality and the war effort. We shall also consider the impact of the purge of modern art under Hitler on the work of such noted modernists as Otto Dix and Kthe Kollwitz, who chose to remain in Germany, and on the art of those who fled into exile, among them John Heartfield, George Grosz, and Max Beckmann. The final weeks of the course will consider critical issues involved in recent--and invariably controversial--attempts in museum building, sculpture, and site-specific installations to memorialize the Holocaust and examine Germany's Nazi past.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

HAA 1470 - PHOTGRPHR PHOTGRPHY SINC WWII

Minimum Credits: 3
Maximum Credits: 3
This course explores the tremendous range of photographic expressions and examines the contributions of significant post-World War II image-makers.
Academic Career: UGRD
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

HAA 1490 - ART SINCE 1945

Minimum Credits: 3
Maximum Credits: 3
This course will present a review of art movements in America and Europe form 1905 - 1945 in the introduction, followed by a more intensive study of post-World War II art movements in Western Europe and America from 1945 to the 1980's. We will give special attention to: a) different styles of art which fit into the label "abstract expressionism" b) different styles under "pop(ular) art" c) conceptual art movements d) issues in critical evaluations of contemporary art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

HAA 1533 - THOMMAS JEFFERSON, ARCHITECT

Minimum Credits: 3
Maximum Credits: 3
Expert in politics, music, archaeology, agriculture, foreign and ancient languages, drawing, writing and surveying, Thomas Jefferson also educated himself from a conventional dilettante to the status of a formidable power in architecture. Creator of three unquestioned building masterpieces, Jefferson was the prime mover in style in architecture. The course alternates lectures on the significant monuments with students' reports on individual research topics.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1601 - SPECIAL TOPICS-JAPANESE

Minimum Credits: 3
Maximum Credits: 3
Special topics in Japanese art.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1610 - EARLY CHINESE PAINTING

Minimum Credits: 3
Maximum Credits: 3
Illusionistic painting developed in china as an independent art form at a time contemporary with the rise of Confucian humanism. Although the craft of painting can be traced to the Neolithic period. Its real beginnings can be studied in relation to the art of writing. This course will examine paintings form c. 2500 B.C. To the tang dynasty (618-907 A.D.).
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1620 - LATER CHINESE PAINTING

Minimum Credits: 3
Maximum Credits: 3
A lecture and a discussion course on secular painting in china during the T'ang, Sung, Ming, and Ch'ing periods--form the VIIth century through the early XIXth century. Pre T'ang works will be used mainly as introductory information, although attention will be given to the development of the literary and critical evidence of earlier eras. Buddhist painting and wall-painting will be dealt with only when these can be shown to relate to studio painting.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1630 - CHINA: VILLAGE & URBAN ARCHITECUTRAL SPACE

Minimum Credits: 3
Maximum Credits: 3
The design of Chinese cities is guided by philosophical principles established in the early dynastic period. Imperial cities follow a regular grid pattern that faces south, and includes an inner city, open only to the imperial leaders and aristocrats, and an outer city in which the business is carried out. The design and use of the city is guided by Confucian and Daoist ideals. Religious centers follow palace designs, but are tied to Buddhist, Confucian and Daoist practice. Village centers are arranged according to Daoist ideas about nature called Fengshui.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 1640 - 20TH CENTURY CHINESE ART

Minimum Credits: 3
Maximum Credits: 3
The 20th century in china was a period of tremendous change. Artists and the society in which they lived crashed into the modern world to struggle with the weight of tradition as well as the draw of the new. We will consider this period and artistic visions of it by looking at arts including printmaking, painting, film, installation and other synthetic and combined forms. All artistic production will be contextualized within the political and cultural history of the period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 1641 - CONTEMPORARY CHINESE ART

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

HAA 1652 - JAPAN: BUDDHIST ART & RITUAL

Minimum Credits: 3
Maximum Credits: 3
The course will examine pre-modern Japanese Buddhist art, including architecture, sculpture, and painting, and the relationship of these images to

ritual practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 1653 - ANCIENT EAST ASIAN VISUAL TRADITIONS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to explore the early cultures of East Asia through the study of material culture. It is arranged in chronological order, beginning with the Paleolithic and including the Neolithic, through the formation of states and empires in China, Korea and Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 1654 - EARLY JAPAN: MATERIAL CULTURE & RITUAL

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1656 - JAPAN: ARCHITECTURE AS PERFORMATIVE SPACE

Minimum Credits: 3
Maximum Credits: 3
This course focuses on Japanese buildings from 700-1700 CE, including ancient Shinto shrines, Buddhist temples, palaces, castles, and mausolea, with a goal toward exploring how such buildings and their interiors worked as spaces for sacred rituals and secular activities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 1680 - JAPAN: ARTIST AND CITY

Minimum Credits: 3
Maximum Credits: 3
This course will examine the dichotomy in aesthetic tastes and values visible in the arts of the Edo period (1615-1868), focusing primarily on the imperial city of Kyoto and the urban milieu of Edo. Topics to be covered include paintings, prints, performance arts, and architecture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1692 - BUDDHISM CIVILIZATION ALONG THE SILK ROAD

Minimum Credits: 3
Maximum Credits: 3
This class serves as an introduction to Buddhism from its origins through the seventh century CE as it moved along the Silk Road, the ancient EurAsian trading network that is considered one of the earliest and most important super highways of trade and culture. Concomitantly, it serves as an introduction to the silk road as the scenario for contact and exchange. The emphasis is on religious praxis, the actors and places that transformed Buddhism and were transformed by it. We will examine archaeological remains and art and discuss how they complement or sometimes contradict textually-based historical narratives. Through the examination of four case studies we will discuss questions related to religious interaction as embodied in material culture and analyze it in context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

HAA 1805 - EARLY FRENCH FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the first three decades of film in France, from turn-of-the century 'primitive' experiments to the first films with sound by Jean Vigo and Jean Renoir in the early 1930s. The works considered include narrative films from the 'teens and twenties', as well as experimental works by artists such as Marcel Duchamp, Ferdinand Leger, Man Ray, Jean Cocteau, Luis Bunuel and Salvador Dali. The course emphasizes the extraordinarily innovative contributions of French film during these years.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1806 - AMERICAN INDEPENDENT FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the development in the U.S. Of independently produced film as an art form, and the filmmaker as an artist, from World War II to the present. Filmmakers to be considered include Maya Deren, Kenneth Anger, Stan Brakhage, Bruce Baillie, Hollis Frampton and others. An examination will be made of the relationships between the films studied and other forms of modern art, such as "abstract expressionism", "structuralism" and "postmodernism". This course does not include "independent" Hollywood and other commercial feature filmmaking.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1820 - DOCUMENTARY FILM

Minimum Credits: 3
Maximum Credits: 3
This course examines the development of documentary film from the late 19th century to the present. The films to be considered include such classics as Nanook of the North, Man with a Movie Camera, Triumph of the Will, and Titicut Follies. The premise of the course is that documentaries are never "objective" in any absolute sense. The course will demonstrate, rather, that the forms and strategies employed in a documentary film invariably reveal the thinking of the filmmaker as an individual, and reveal the era and context in which the film was made.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Humanistic GE. Req.

HAA 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Independent reading and research with one faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

HAA 1903 - HISTORY OF ART AND ARCHITECTURE INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Academic credit is awarded for practical professional experience gained through a directed internship. The internship is arranged by the student through the University internship office in consultation with the undergraduate advisor in art history.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: History of Art & Architecture (BA)

HAA 1905 - MUSEUMS STUDIES INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3

Museum studies minors are required to complete a 3-credit academic internship under the course number HAA 1905. This is both an academic course and an internship placement. Students receive substantive mentoring from a site supervisor at a local museum, collection or historic site, and engage in projects with learning outcomes, whether in curatorial, educational, communications or development departments. Students also participate in monthly cohort meetings with the other interns enrolled in the course, under the guidance of an HAA faculty member, and are required to produce a final product. Note: academic internships through HAA 1905 are also available to HAA majors as an optional elective. The student must apply for the internship through the HAA department.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

HAA 1906 - INTEGRATED FIELD TRIP ABROAD

Minimum Credits: 2
Maximum Credits: 2
This is a course that students can take while studying abroad.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HAA 1908 - INDEPENDENT PROJECT

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

HAA 1909 - UNDERGRADUATE RESEARCH ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 3
This course enables students to receive academic credit for serving as assistants to faculty members who are conducting pre-existing research projects (i.e. Preparing work for publication or a conference). This collaboration will result in a meaningful experience for the student that introduces them to and gives them grounding in the ethos and mechanics of research and publication.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

HAA 1911 - ARCHTCRL SEM: MONOGRPHIC TOPCS

Minimum Credits: 3
Maximum Credits: 3
A seminar for senior architectural studies majors, with changing topics: treats single architects, buildings, or cities.
Academic Career: UGRD
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

HAA 1950 - SENIOR THESIS

Minimum Credits: 3
Maximum Credits: 3
In this course a senior major in the history of art will research and write a research paper and present it as if for publication. The area and topic will be decided upon in consultation with a specific faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

HAA 1951 - HONORS RESEARCH SEMINAR

Minimum Credits: 1
Maximum Credits: 1
This seminar is intended for undergraduate students pursuing an honors thesis project in the department of the History of Art and Architecture. Students will devise and carry out research for their thesis paper under the direct supervision of a qualified faculty member in the department, depending on the student's specialized interest. That faculty member will guide the student through the production of the paper in accordance with stipulated deadlines for outlines and drafts leading up to the final work.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

HAA 1990 - 20THC RUSSIAN ART:BETWEEN EAST AND WEST

Minimum Credits: 3
Maximum Credits: 3
This course surveys Russian art of the 20th century - including painting, graphic design, handicrafts, stage design, and architecture spanning the period from the world of art/Mirisskustva (1890s) to the present day. It (1) acquaints students with major art groups, movements and their key representatives, (2) traces the role of icons and folklore traditions in works throughout the century, (3) elucidates the system of patronage and museums and galleries, and (4) examines the symbiosis between Russian art and ideology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Honors

HONORS 0001 - UNIVERSITY ORIENTATION

Minimum Credits: 1
Maximum Credits: 1
An informational seminar open to honors-qualified freshmen. Students gain a better understanding of university services, functions and policies as well as the opportunities available through the honors college.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: University Honors Course

HONORS 0010 - CHANCELLOR SCHOLAR ORIENTATION

Minimum Credits: 1
Maximum Credits: 1
An informational seminar open to freshmen chancellor scholars. Students will gain a better understanding of university services, functions and policies as well as the opportunities available through the honors college.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: University Honors Course

HONORS 0021 - SEMINAR: HUMANITIES

Minimum Credits: 1
Maximum Credits: 1
An informational seminar open to honors-qualified sophomores considering majors in the humanities. Students will explore majors in greater depth, how to conduct research in the disciplines, and preparation for post-graduate opportunities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: University Honors Course

HONORS 0080 - BRACKENRIDGE RESEARCH SEMINAR

Minimum Credits: 1
Maximum Credits: 1

This seminar will provide Brackenridge research fellows with the opportunity to develop their summer research projects further, culminating in an abstract, a research paper and a poster.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: University Honors Course

HONORS 0081 - HONORS COLLEGE/HEALTH SCIENCES RESEARCH SEMINAR

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

HONORS 0082 - SEMINAR IN CONDUCTING RESEARCH

Minimum Credits: 1
Maximum Credits: 1
This seminar is intended for students wishing to learn about research, particularly the kind of research intended to result in a significant project, e.g., A research monograph, a thesis written for a senior project for the BPhil degree. Students at any point of their research process will benefit from this seminar. Topics will include how to do research from an interdisciplinary perspective, how to focus in on a suitable research topic, how to approach faculty to engage their assistance, and the various research opportunities available.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: University Honors Course

HONORS 0083 - SEMINAR IN COMMUNITY-BASED RESEARCH

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

HONORS 1010 - SPECIAL TOPICS SEMINAR

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1020 - SPECIAL TOPICS SEMINAR 2

Minimum Credits: 2
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1021 - ENERGY, SCIENCE, SOCIETY & COMMUNICATION SEMINAR

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: LG/SNC Elective Basis
Course Attributes: University Honors Course

HONORS 1130 - DISCOURSES IN THE HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: MIN CUM GPA: 3.25
Course Attributes: University Honors Course

HONORS 1131 - GREAT BOOKS: A SEMINAR IN THE MODERN HUMANITIES, PART 1

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1132 - GREAT BOOKS: A SEMINAR IN THE MODERN HUMANITIES, PART 2

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

HONORS 1133 - GREAT BOOKS AND MODERNITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1160 - DISCOURSES IN HUMAN KNOWLEDGE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1510 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course focuses on a special topic which will vary from term to term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1540 - HONORS FIELD STUDIES IN WYOMING

Minimum Credits: 6
Maximum Credits: 6
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: University Honors Course

HONORS 1541 - HONORS FIELD STUDIES AT SPRING CREEK

Minimum Credits: 5
Maximum Credits: 5
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: University Honors Course

HONORS 1542 - HONORS FIELD STUDIES IN WYOMING - STUDIO ARTS

Minimum Credits: 3
Maximum Credits: 3
This summer field study program will be conducted at the Allen l. Cook spring creek preserve near Rock River, Wyoming. The course will focus on studio arts topics.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: University Honors Course

HONORS 1544 - READING THE EARTH: WYOMING FIELD STUDIES IN ECOLOGY AND PALEONTOLOGY

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1610 - CONCEPTS AND VALUES IN MEDICINE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1620 - CLINICAL AND MEDICAL RESEARCH

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1630 - CRITICAL EVALUATION OF SCIENTIFIC LITERATURE

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1640 - MEDICINE AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: University Honors Course

HONORS 1905 - BPHIL THESIS RESEARCH

Minimum Credits: 1
Maximum Credits: 6
Undergraduates pursuing the bachelor of philosophy degree through the honors college may register for this course only after their thesis proposal has been approved and they have been admitted to honors college candidacy.
Academic Career: Undergraduate
Course Component: Thesis Research
Grade Component: Satisfactory/No Credit
Course Attributes: University Honors Course

Human Resources Management

BUSHRM 1050 - HUMAN RESOURCES MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Provides an introduction to the management of human resources at the organizational level. HRM is viewed as an integral part of the basic management process and the orientation of the course is toward developing managerial skills useful in establishing organizational personnel policy. Specific topics include the role of HR in the management process, HR planning and forecasting, job information systems, recruitment and selection, HR development, compensation, legal framework and evaluation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: College of Business Admin; LVL: So, Jr, Sr

BUSHRM 1660 - PROJECTS IN HUMAN RESOURCES MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
BUSHRM 1685 connects undergraduate human resources students with a partner organization to develop/implement specific human resources strategies for an on-campus, student-operated business. Topics include: recruitment, hiring, training and team development, assessment and feedback, organizational change, and succession planning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSHRM 1665 - NEGOTIATING IN BUSINESS

Minimum Credits: 3
Maximum Credits: 3
Negotiating permeates human interactions. It affects balance and distribution of resources among nations, organizations, families and individuals. In business, outcomes of negotiations influence bottom-line. Students will understand theory behind successful negotiations; recognize situations that call for negotiation; explore use of alternative negotiating strategies and tactics; and be able to analyze, plan, and carry out a successful negotiation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSHRM 1050 (MIN GRADE 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSHRM 1670 - GLOBAL WORKFORCE MANAGEMENT AND CHANGE

Minimum Credits: 3
Maximum Credits: 3
This course provides a framework for understanding business and legal challenges associated with effective workforce management around the world. We will examine how labor markets in the Americas, Europe and Asia compare in terms of labor costs and supply, workplace culture, and employment law. News events will be used to illustrate the complex cultural and regulatory environment that multi-international firms face in such areas as talent and performance management, offshore outsourcing, downsizing and industrial relations. Finally, we will focus on successful expatriate assignments and globally-oriented careers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BUSHRM 1050 (MIN GRADE 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSHRM 1675 - HUMAN RESOURCES STAFFING

Minimum Credits: 3
Maximum Credits: 3
Provides an in-depth examination of the organizational staffing process. Procedures for human resource needs assessment such as personnel audits and forecasting are discussed. Recruitment strategies and recruitment sources are explored. The process of organizational choice by candidates may be covered. Emphasis on understanding basic types of assessment tools and procedures for choosing new employees. Core concepts in measurement and validity are discussed. Issues relating to organizational entry and socialization may also be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BUSHRM 1050 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSHRM 1677 - TRAINING AND DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
In 2012 U.S. Firms spent $62 billion on training and development programming for their employees. Such programs address the diversity of skills and demographic characteristics of the workforce, the complex technologies that workforce utilizes in the workplace and the competition resulting from ongoing globalization. This course is designed to provide students with an understanding of the strategic advantage gained by a firm as it designs and implements training and development programs. Topics covered include needs assessment, training design, training methods, and evaluation of training. In addition, employee, career and management development and the use of technology in training will be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BUSHRM 1050 (MIN GRADE 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSHRM 1680 - COMPENSATION AND PERFORMANCE MANGEMENT

Minimum Credits: 3
Maximum Credits: 3
Examines the general structure of an organization and the rewards employees seek in exchange for the efforts and contributions they provide. Topics include: rewards and motivating work environment; government and union influences; job content analysis, description and evaluation; determining competitive relationships, developing pay structures; measuring performance and paying for performance; employee benefits; administration of the compensation plan; executive, managerial, professional, and sales compensation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BUSHRM 1050 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSHRM 1685 - EMPLOYMENT AND LABOR RELATIONS

Minimum Credits: 3
Maximum Credits: 3

Provides a close examination of the day-to-day labor-management relationship and processes. Considers contract negotiations, contract administration, discipline and grievance procedures, and third-party conflict resolution assistance such as mediation, fact-finding and arbitration. Emphasis is placed on the structure, organization, and objectives of the parties. The similarities and differences between private and public-sector bargaining are also considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BUSHRM 1050 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSHRM 1686 - SPORTS MANAGEMENT PROJECT COURSE

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to provide the student a meaningful experience with a real-world client and problem. Each project is distinct and generally will afford opportunities for a team of students to apply conceptual and analytical skills taught in the CBA major and core classes and to report to the client the result of all assessments. While particular projects may have a primary focus on one functional area (marketing, finance, accounting, human resources, supply chain, business information systems or global management), each will also feature cross functional dimensions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSHRM 1687 - HUMAN RESOURCES STRATEGY AND PLANNING

Minimum Credits: 3
Maximum Credits: 3
The role of human resources in creating a sustainable competitive advantage is covered in detail. Topics often include organizational factors (e.g. cultures, values) that impact HR planning and strategy, HR environmental analysis and competitor analysis, internal analysis of the HR system for competitive initiatives, HR contributions to business strategy formulation, human resources forecasting and planning, HR strategy implementation, succession planning, facilitating organizational change, downsizing and restructuring the organization, and HR aspects of mergers and acquisitions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BUSHRM 1050 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSHRM 1688 - HUMAN RESOURCE ANALYTICS

Minimum Credits: 3
Maximum Credits: 3
Three credit elective in the College of Business Administration. The course is designed to acquaint students with this rapidly expanding area in the human resource field. Using simulations from a variety of human resource analytics packages common in HR departments, students will learn to critically assess data and metrics for human resource problem solving and examine the manner in which such data is organized and reported. The class will also provide opportunity to interpret and report results from statistical and predictive analysis to aid decision making in the firm.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: STAT 1100 or 1000

BUSHRM 1689 - SPORTS MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Many students aspire to careers in the NFL, NBA, and major league baseball. But, as we all know, employment prospects in those organizations are decidedly limited. However, a February, 2014 forbes.Com post indicates that the sports industry as a whole will grow by $145.3 billion between 2010 and 2015. This course recognizes that the sports industry is much broader than just professional sports teams including firms in sports clothing, sports equipment, sports drink, sports medicine, venue management, food and beverage, sports media, and sports marketing. The sports industry is a labor intensive industry with human resource and project management skills as key success factors. This class is designed to examine these administrative skills which will serve well you in any of your career pursuits while satisfying your passion for sports. Planned topics, exercises and activities in the course include a look at game day preparations, facilities management including a behind the scenes tour of a facility, player selection (through a draft simulation) and retention, coaching, licensing, sports media, and sports marketing.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, or Undeclared.

BUSHRM 1690 - HUMAN RESOURCES MANGEMENT INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The human resources management internship provides business credits for project assignments that augment a professional HRM work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: BUSHRM 1050 (MIN GRAD 'C')

BUSHRM 1695 - HUMAN RESOURCES MANGEMENT INDEPENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of human resources management issues or problems to which they have been introduced in other human resources management courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PREQ: BUSHRM 1050 (MIN GRAD 'C')

BUSHRM 1711 - ITALIAN HOSPITALITY AND TOURISM

Minimum Credits: 3
Maximum Credits: 3
The course will explore the history, culture and heritage of Italy including food, wine and coffee. Museums, historical and religious landmarks will also be explored. Tourism is an important aspect of the Italian culture. Students will take an objective view on agritourism, wine tourism and ecotourism and analyze the impact and benefit to Italian tourism industry.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Hungarian

HUN 0101 - HUNGARIAN 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HUN 0102 - HUNGARIAN 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0291 or LCTL 0391; MIN GRADE: 'C' FOR LISTED COURSES

HUN 0103 - HUNGARIAN 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0292 or LCTL 0392; MIN GRADE: 'C' FOR LISTED COURSES

HUN 0103 - HUNGARIAN 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: HUN 0102; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies, Transatlantic Studies

HUN 0104 - HUNGARIAN 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0293 or LCTL 0393; MIN GRADE: 'C' FOR LISTED COURSES

HUN 0105 - HUNGARIAN 5

Minimum Credits: 3
Maximum Credits: 3
This course builds upon the foundations from previous levels of Hungarian to help you refine and consolidate your knowledge from those levels and to expand your speaking, listening, reading and writing skills in more complex communicative situations. By further developing these skills, you will be able to express yourself creatively in both written and spoken Hungarian with more advanced-level grammar, context-specific vocabulary and a more thorough understanding of the cultural nuances that influence interactions in the language. We will also continue to develop cultural understanding of Hungary's customs, traditions, history and geography. Learning outcomes: Upon completion of the course, students who have attended classes and successfully completed all assignments, tests and quizzes with a minimum grade of B- should be able to: successfully apply their knowledge of the fundamental conventions of the language (e.g., word order, conjugation patterns, verb modes, noun cases) to analyze and create spoken and written discourse in familiar and several unfamiliar contexts, narrate and describe in all time frames using connected discourse of paragraph length, using aspect appropriately, in speech and writing incorporate a number of cohesive devices in their writing when providing descriptions or summaries, understand short spoken and written conventional narrative and descriptive texts, confidently relying on contextual clues if necessary , converse confidently with sufficient accuracy, clarity and precision when dealing with familiar situations, formally and informally, have a more in-depth understanding of Hungarian traditions, customs, geography and history. Grammar topics will include: review and expansion of previously learnt material (e.g. the conditional, the imperative-subjunctive, possessives, postpositions), the causative, infinitives with endings, relative clauses and various types of pronouns.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HUN 0106 - HUNGARIAN 6

Minimum Credits: 3
Maximum Credits: 3
This course builds upon the material from previous levels of Hungarian and is meant to further expand your speaking, listening, reading and writing skills. We will be refining your previously acquired skills and learning new vocabulary to enhance your communicative and pragmatic competence. As a result, you will be able to use Hungarian in more complex communicative situations in speech and writing that require creative and resourceful use of advanced-level language skills. As always, we will also continue to develop cultural understanding of Hungary's customs, traditions, history and geography. Learning outcomes: Upon completion of the course, students who have attended classes and successfully completed all assignments, tests and quizzes with a minimum grade of B- should be able to: narrate and describe in all time frames, dealing effectively with some unanticipated complication, produce organized written descriptions, summaries and narrations with cohesive devices spanning several paragraphs, with good control of aspect understand more expanded spoken and written descriptions of various subjects as well as narrations in all time frames, confidently identifying the main facts and many supporting details contribute to conversations on a variety of familiar topics with ease and convey their message without misrepresentation or confusion, formally and informally have a more in-depth understanding of Hungarian traditions, customs, geography and history. Grammar topics will include: review and expansion of previously learnt material (e.g. cataphoric pronouns, the imperative-subjunctive, causative, the conditional etc.); functions of verbal prefixes, adverbial participles, reported speech.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HUN 0120 - HUNGARIAN CULTURE THROUGH CONVERSATION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to various elements of Hungarian culture through folk songs and films and focuses on the improvement of speaking and listening skills in Hungarian, with a secondary emphasis on reading and writing. Students will increase and refine their vocabulary and enhance their communicative competence and conversational proficiency while practicing their knowledge of Hungarian grammar. Students will also gain a deeper understanding of Hungarian folklore, traditions and history. Some secondary readings will be provided in English for background information. Course objectives: Upon successful completion of the course, students who have attended classes and successfully completed all assignments and tests with a minimum grade of B will be able to: â converse about various everyday topics in Hungarian with topic-specific vocabulary with increased fluency â demonstrate an improved understanding of Hungarian grammar â manifest improved writing skills, including spelling â enhance their understanding of native speakers â manifest improved pronunciation skills â demonstrate a deeper understanding of Hungarian traditions, customs, folklore, geography and history â demonstrate basic knowledge about the characteristics of Hungarian folk music and representative examples of cinematographic art â make cross-cultural comparisons between their own culture and that of Hungary.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: HUN 0102 with a minimum grade of C

HUN 1615 - OUTSIDERS ON THE MARGINS: THE AFTERMATH OF SOCIALISM ON FILM

Minimum Credits: 3
Maximum Credits: 3
this course introduces students to the aftermath of Socialism, focusing on East Germany and Hungary through movies. We will look at issues that have been specific to societies in the Eastern Bloc taking these two areas as examples, and thus offer insight into the development of these societies after the fall of Socialism all the way up to the present. A deeper understanding of this development will encourage students to think about current historical-political events from a broader comparative perspective, promote their knowledge about the region of East Central Europe, and help discuss these events in an informed manner. Film as an art reflects the struggles and preoccupations of the time and society it emerges from. The selection of films in this course provides students with a representative sample of issues that take center stage in movies about the shift from Socialism to Capitalism and the aftermath of this transition. Course readings and class discussions illuminate the historical and cultural background to the cinematographic pieces watched and discussed in the course. The movies, readings and class discussions provide insight into how Socialism shaped society and what ramifications it has for the further course of history after its collapse in 1989. More than thirty years after the official end of Socialism, the repercussions of the "cursed forty years" are still palpable in people's lives, their collective memory, societal issues and the way they influence domestic and foreign politics. Under Socialism, inhabitants of the Eastern Bloc largely remained isolated from the Capitalist world and thus remained outsiders to it, quasi-exotic beings who were often regarded with curiosity, pity or suspicion by those in the West. These sentiments are still echoed despite the collapse of Socialism in 1989 and the EU's Eastern Enlargement in 2004, as inhabitants of both the former Eastern Bloc countries and the Western world are still coming to terms with East Central Europe's transformation into democratic societies with a free market economy and the free movement of labor. Historical and cultural differences that had existed before the creation of the Iron Curtain did not cease to be in the Post-Socialist era; on the contrary, they precipitate in discussions and policy-making in the EU and at a global level, where members of the Visegrád countries and their former Eastern Bloc neighbors are yet again often regarded as the nonconformist outsiders on the margins of Europe. In an era of globalization, would we not expect mutual understanding of each other to be less problematic than before the change in 1989? What is the connection between forty years of Socialism and our current day in a Post-Socialist era? We will investigate issues of economic disparity, gender, sexuality, race, ethnicity, ability difference and criminality through a selection of cinematographic works made after 1989 presenting the effect of the change on people's lives from various perspectives. Some of these include the perspective of women, homosexuals, Jews, migrants, people with disabilities, and criminals (if they indeed are criminals), all in addition to the "average" person under Communist rule living on what was perceived by many "the margins" of Europe. The course thus looks not only at the Socialist and post-Socialist citizen as an outsider, but also groups that find themselves in an even more marginalized position ¿ we might as well call them double outsiders because of their position in a society already disadvantaged to more

developed Capitalist ones.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HUN 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
I believe that this course ought to have been added automatically when the HUN subject code was created. We do not have course descriptions for 1901 Independent Study Courses in our other subject codes.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

HUN 1905 - UNDERGRADUATE TEACHING ASSISTANT IN HUNGARIAN

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit

HUN 1909 - SPECIAL TOPICS IN HUNGARIAN

Minimum Credits: 3
Maximum Credits: 3
The syllabus will change each time this course is offered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

HUN 1915 - FULBRIGHT SEMINAR IN HUNGARIAN STUDIES

Minimum Credits: 3
Maximum Credits: 3
Hungary today is a key site for competing plans for state- and peoplehood in the European Union. The country is also critical for making sense of the relationship between Europe's imperial-colonial legacies, Central Europe's capitalist and (post)socialist transformations, and EU integration, while providing deeper insight into the global issues of 'politics from below,' human rights and security, and migration. This is an interdisciplinary course taught by a visiting Hungarian Fulbright distinguished scholar. The content of the course will depend on the field and research of the individual scholar, but will typically explore history, culture, politics and / or society from a transnational and global perspective, focusing on contemporary Hungary within the broader context of Central Europe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Industrial Engineering

IE 0015 - INTRODUCTION TO INFORMATION SYSTEMS ENGINEERNG

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to systems thinking and information management. Students learn to identify the risks of system sub-optimization created by silo oriented operations in organizations. They practice how to define, design, and develop databases needed to satisfy the information requirements of their customers and the entire organization. Using object based data models students design a conceptual model to discuss with customers (end users) and then convert the concepts to relational models for database developments using normalization methods. To practice the database development process students are assigned a project that requires research and preparation for customer interviewing, conceptual design, customer verification, logical design, prototype development using ms-access, testing and presentation of results. This course serves as a primer for advanced courses in information management and systems optimization.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0012 or 0016 or 0711; PLAN: Industrial Engineering (BSE or BEH)

IE 1012 - MANUFACTURE OF STRUCTURAL NANOMATERIALS

Minimum Credits: 3
Maximum Credits: 3
Description: this course covers contemporary research topics on the design and manufacture of nanostructured materials. In addition to design and manufacturing, this course would also emphasize the nanometer-scale phenomena that make nanostructured materials particularly attractive for structural applications. Topics such as dislocation theory, large strain plasticity phenomena, super plasticity and kinetics of coarsening will be discussed in the context of structural nanomaterials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering
Course Attributes: Hourly Final

IE 1013 - MANUFACTURING PROCESS ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to instill a fundamental understanding of manufacturing processes by focusing on the processes, metallurgy and mechanics of deformation in metal forming. To this end, analysis techniques will be developed from solid mechanical principles (stress-strain relationship, deformation and failure) which would then be applied bulk deformation and material removal processes. The course assumes no prerequisites except basic concepts of stress, strain and strength of materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1014 - DATA BASE DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course introduces the fundamental aspects of database design and management within the context of a relational data base management system (DBMS). Covered topics include: relational model, database design life-cycle, database design optimization, client/server architecture, data modeling, SQL, database security, database management, data warehousing, internet database environment. Students will gain hands-on experience in analysis, design, implementation, and management of relational data base systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1015 - GEOGRAPHIC INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Explore the concepts and history of geographic information systems and learn to effectively use the most utilitarian GIS software, ArcGIS.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1035 - ENGINEERING MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course focuses on management theory applied to engineering and technical organizations. Topics include: the management process and management functions (planning, organizing, leading, and controlling); project management; managing technical people; engineering ethics, globalization, and other contemporary management concepts.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1039 - ENTREPRENEURSHIP FOR ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
This course considers the development of a new technology company from ideation and opportunity evaluation to capital generation and launch. It includes an understanding of accounting principles, budgeting, capital markets, venture capital, operating in the development stage, executive and employee requirements, product development, and growing the company.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1040 - ENGINEERING ECONOMIC ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Discusses cost estimation, time value of money, interest rate calculations, economic equivalence concepts, comparison of alternative investments, evaluating economic life and replacement alternatives, depreciation, the impact of taxes on engineering economic decisions, and dealing with uncertainty.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0140 or 0220 or 0221 or 0235; PROG: Swanson School of Engineering (UENGR)

IE 1042 - ENGINEERING DERIVATIVES MARKET

Minimum Credits: 3
Maximum Credits: 3
The basic building blocks for engineering futures contracts, call and put options, and swaps are studied within the context of real-world environments. By the end of this course learners will have a good understanding of how these tools are built for the purposes of hedging risks and formulating portfolio strategies, all within the goal of managing financial risk.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1071 and IE 1081; PLAN: Industial Engineer (BEH or BSE)

IE 1044 - INVESTMENT SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to basic concepts of modern quantitative finance and investment. Group projects involving financial market data. Topics: basic interest rate; evaluating investments: scenario-based analysis and Monte Carlo simulation; fixed-income markets: bonds, yield, duration, and portfolio immunization; measuring risk: volatility and value at risk; the concept of investment diversification in the presence of uncertainty; designing optimal security portfolios; the capital asset pricing model, practical implementation of the concepts, including comparison of loan (e.g., house and auto) terms, credit card financial terms; derivative market and option pricing. No prior knowledge of finance required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1070 or ENGR 0020; PLAN: Industrial Engineering (BSE or BEH)

IE 1051 - ENGINEERING PRODUCT DESIGN

Minimum Credits: 3
Maximum Credits: 3
Lectures will cover the following: cad functions and cad systems; design process; hardware issues; software issues; use of commercial software; graphics primitives; mathematical transformations; solid modeling; database management systems; relational databases; adding intelligence to cad systems. Laboratory sessions will deal with a diversity of design projects utilizing commercial software packages.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: IE 1052; PROG: Swanson School of Engineering

IE 1052 - MFG PROCESSES AND ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Introduction to manufacturing principles and their importance in product development. Traditional and emerging processes are covered, including additive manufacturing, micro manufacturing, and nonmanufacturing. The integration of manufacturing, design, and materials is presented as a key to rapid product realization. Unit manufacturing processes are considered in work cell organization, flexible flow lines, and quality control. The course laboratory involves examination of the details of manufactured products, using various manufacturing processes, and learning the importance of material and process selection in product development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: School of Engineering

IE 1054 - PRODUCTIVITY ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Introduction to industrial engineering concepts and thought process mapping, operations analysis, and design, 6s, lean systems, root cause analysis, methods engineering, standards development, predetermined time systems, computerized work measurement, motivation and incentives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: ENGR 0020 or IE 1070; PROG: Swanson School of Engineering

IE 1055 - FACILITY LAYOUT AND MATERIAL HANDLING

Minimum Credits: 3
Maximum Credits: 3
Introduction to facility layout and location topics including activity relationships, space and personnel requirements, layout types, manual and computer algorithms for constructing layouts, single facility location methodologies, and warehouse operations. Material handling methods and equipment including conveyors, lift trucks, carousels, automated guided vehicles, and automated storage and retrieval systems are also discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1070 or IE 1081 or ENGR 0020; CREQ: IE 1052; PLAN: Industrial Engineering(BSE)

IE 1061 - HUMAN FACTORS ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
A study of human abilities, characteristics, behavior, and motivation in the design, development and operation of components and systems designed for human use.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: ENGR 0020 or IE 1070; PLAN: Industrial Engineering; LVL: Junior or Senior

IE 1062 - DATA MINING

Minimum Credits: 3
Maximum Credits: 3
This is an introductory data analytics class that requires probability as a prerequisite. The objective is to prepare students to effectively collect and analyze data and to teach data-driven thinking, problem-solving and decision-making. In this class, we will cover various statistics and data mining methodologies and use them to analyze real-world problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1070 and IE 0015; LEVEL: Sophomores and above; PROG: Swanson School of Engineering

IE 1070 - PROBABILITY, RANDOM VARIABLES, AND DISTRIBUTIONS

Minimum Credits: 3
Maximum Credits: 3
The main objective of this course is to introduce IE majors to probability and probabilistic modeling as a foundation for motivating statistics and statistical methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0150 or 0230 or 0231 or 0235; PROG: Swanson School of Engineering

IE 1071 - STATISTICAL TESTING AND REGRESSION

Minimum Credits: 3
Maximum Credits: 3
Hypotheses testing; multiple regression; empirical model building; analysis of variance and design of experiments; goodness-of-fit tests and contingency tables; introduction to statistical quality control.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0020 or IE 1070 (MIN GRADE 'C'); PROG: School of Engineering

IE 1072 - DESIGN OF EXPERIMENTS & QUALITY ASSURANCE

Minimum Credits: 3
Maximum Credits: 3
This elective course serves as a continuation of the second course to provide IE majors with background in designed experiments and quality assurance methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1071; PROG: Swanson School of Engineering

IE 1073 - MODELING IN SPORTS AND GAMES

Minimum Credits: 3
Maximum Credits: 3
This course will cover fundamental stochastic and statistical modeling concepts arising in the context of sports prediction and strategy. The course will rely heavily on tools such as statistical analysis and Markov processes. Elementary concepts from game theory, decision theory and Markov decision processes will be introduced. We will consider examples arising in baseball, basketball, football and ice hockey, as well as other sports and games. Students will present a project on a topic of their choosing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1081 and 1082 and 1083; PROG: Swanson School of Engineering

IE 1076 - TOTAL QUALITY MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
introduces the total quality management philosophies and practices of Deming, Juran, and others. We will focus on the use of statistical process control, understanding variability and process capability, acceptance sampling, as well as managing supplier relationships. Research papers and student teaching projects allow students to explore additional topics such as Kaizen, Taguchi methods, FMEA, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1071 or ENGR 0020; PROG: Industrial Engineering

IE 1079 - Logistic and Supply Chain Engineering

Minimum Credits: 3
Maximum Credits: 3
Modern supply chains are based on networks with a number of actors from manufacturer to distributor to retailer. This course covers the use of modeling for coordinating production, inventory, distribution, and transportation across a supply chain network.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0020 or IE 1070) and IE 1081; PROG: Swanson School of Engineering

IE 1080 - SUPPLY CHAIN ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
An overview of supply chain management with an emphasis on operations and strong quantitative orientation. Supply chain strategies; sourcing decisions; demand forecasting; aggregate planning; managing supply and demand; production and inventory control systems including MRP and JIT; dealing with uncertainty; distribution networks; coordination and integration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1055 or 1082; PROG: Swanson School of Engineering

IE 1081 - OPERATIONS RESEARCH

Minimum Credits: 3
Maximum Credits: 3
Introduction to the decision-making process and mathematical modeling; theory and methodology of the simplex algorithm; duality theory, complementary slackness, post-optimality analysis; transportation and assignment problems; introduction to integer programming application to real-life case problems; computer codes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0250 or 0280 or 0206 or 0135 or 1181; PROG: Swanson School of Engineering

IE 1082 - PROBLSTC METH IN OPERATNS RES

Minimum Credits: 3
Maximum Credits: 3
Stochastic decision modeling techniques including discrete-time Markov chains, continuous 'time Markov chains and queuing theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (IE 1070 or ENGR 0020) and (IE 1071 or 1081); PROG: Swanson School of Engineering; PLAN: Industrial Engineering (BS)

IE 1083 - SIMULATION MODELING

Minimum Credits: 3
Maximum Credits: 3
Random number generation; distribution functions and random variates; game of chance; applications of discrete event simulation methods of queuing, inventory control, and production planning problems. Introduction to special-purpose simulation languages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1071 or ENGR 0020; PROG: Swanson School of Engineering

IE 1085 - DEPARTMENTAL SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Departmental seminars present the engineering viewpoint by prominent speakers from industry and government. Also serves as an organizational forum for the university chapter of the institute of industrial engineers.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

IE 1086 - DECISION MODELS

Minimum Credits: 3
Maximum Credits: 3
Decision making under uncertainty is the key to understanding a variety of problems from industry, including inventory control, revenue management, energy, healthcare, and logistics. This course covers the fundamentals of stochastic (sequential) decision models, including data-driven and risk-averse methods, with applications to real-world problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1070 or ENGR 0020; PROG: Swanson School of Engineering

IE 1089 - ADDITIVE MANUFACTURING

Minimum Credits: 3
Maximum Credits: 3
In this course we will analyze the seven primary types of additive manufacturing, their materials, and machines, highlighting their benefits and limitations. Examples of industrial applications will be given along with ongoing research trends and future directions. Labs will focus on design for additive manufacturing, data capture and input, machine setup, and post processing. Field trips will include observation of machine building and part production at some local industries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1090 - SENIOR PROJECTS

Minimum Credits: 4
Maximum Credits: 4
Analytical investigation techniques for total project problems in technical organizations. Involves solving of client problems utilizing industrial engineering capabilities acquired by students during program of study. Provides students with project team experience, report writing and seminar presentation of team results. Students must be enrolled in this course at least one month prior to the start of the semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: IE 1035 or 1080 or 1083; PROG: Swanson School of Engineering
Course Attributes: Capstone Course

IE 1098 - SPECIAL PROJECTS

Minimum Credits: 1
Maximum Credits: 4
Independent study projects in specialized industrial engineering topics. Students must have the permission of a faculty member who agrees to mentor the independent study. Independent study is not permitted for subject areas that are part of the regularly scheduled coursework.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

IE 1102 - LEAN SIX SIGMA I (GREEN BELT)

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to lean and six sigma principles with an emphasis on the application of statistics to quality control. Topics include value stream mapping, various lean tools, DMAIC methodology, data collection and measurement, and applications of ANOVA and doe. A project is required and the student should be prepared for green belt certification at the end of the course.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: IE 1054 and (IE 1071 or ENGR 0020); LVL: Junior or Senior; PROG: Swanson School of Engineering;

IE 1103 - LEAN SIX SIGMA II (BLACK BELT)

Minimum Credits: 3
Maximum Credits: 3
This is a follow up course in lean and six sigma covering topics such as influence principles and techniques, systems analysis, design for six sigma, lean enterprise analysis and response surface methods. Several projects are required and the student should be prepared for black belt certification at the end of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1102; PROG: Swanson School of Engineering

IE 1106 - OPERATIONS IMPROVEMENT IN HEALTHCARE

Minimum Credits: 3
Maximum Credits: 3
This course leads students to apply basic industrial engineering tools to healthcare operations, with a focus on healthcare providers. This includes data gathering, process mapping, system analysis and modeling, work sampling, work study, and workflow improvement. This course will provide an overview of the differences between healthcare and other more traditional industrial engineering settings (e.g., manufacturing, retail), and the opportunity to apply industrial engineering techniques, while developing and understanding basic healthcare operations and systems in the United States. (This class is designed to be a complement to IE 1108/2108.)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (IE 1040 and IE 1054) and (ENGR 0020 or IE 1070); PROG: Swanson School of Engineering

IE 1108 - HEALTH SYSTEMS ENGINEERING: QUANTITATIVE ANALYTICS

Minimum Credits: 3
Maximum Credits: 3
This course leads students to apply basic industrial engineering tools to healthcare, with a focus on the financial aspect of healthcare (payers and reimbursement, revenue cycle, and other financial analytics). This course familiarizes students with healthcare financial data, demographic and population health information, quality ratings, and other key data and measures. Students will access data from commercial payers, government healthcare programs and/or hospitals, and utilize data analysis and industrial engineering tools to better understand the financial aspect of healthcare systems in the United States. (This class is designed to be a complement to IE 1106/2106.)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (IE 1040 and IE 1054) and (ENGR 0020 of IE 1070); PROG:Swanson School of Engineering

IE 1122 - FUNDAMENTALS OF SYSTEMS ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the fundamentals of systems engineering, including technical processes (e.g., requirements definition, architecture design, system verification), technical management processes (e.g., project planning, risk management), agreement processes (acquisition and supply) and project-enabling processes (e.g., life-cycle model management, quality management). Key systems engineering techniques and methods (e.g., system modeling and simulation, function-based systems engineering) will also be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Industrial Engineering (BSE or BEH); LEVEL: Senior

IE 1123 - PROJECT MANAGEMENT FOR ENGINEERS

Minimum Credits: 3
Maximum Credits: 3
The focus of the course will be to understand professional project management in achieving strategic organizational objectives and mitigating risks. The process for obtaining professional project management (PMP) certification will be the foundation. The six domains of project management that

will be addressed include: initiating the project planning the project, executing the project, monitoring and controlling the project, project transition and closure, professional and social responsibility.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1035; PROG: Swanson School of Engineering

IE 1144 - DISCRETE OPTIMIZATION: MODELING AND COMPUTATION

Minimum Credits: 3
Maximum Credits: 3
Discrete optimization is a powerful modeling and computational tool in decision making, especially for critical industrial systems (e.g., transportation, energy and healthcare systems). In this course, we focus on learning various modeling techniques, classical and popular models (including location, scheduling and material handling problems), and solution techniques (including exact and heuristic algorithms) for these models that lead to millions of dollars savings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Prerequisites: IE 1081 (Operations Research) for senior undergraduates or IE 2001 (Operations Research) for master students

IE 1155 - DISCRETE OPTIMIZATION AND APPLICATIONS IN INFRASTRUCTURE SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Discrete optimization is a powerful modeling and computational tool in decision making, especially for critical industrial systems (e.g., transportation and energy systems). In this course, the focus will be on learning various modeling techniques, classical and popular models (including location, scheduling and transportation problems) and solution techniques (including exact and heuristic algorithms) for these models that lead to millions of dollars in savings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: IE 1081; PLAN: Industrial Engineering

IE 1185 - STOCHASTIC MODELING AND DATA ANALYTICS IN HEALTHCARE OPERATIONS MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to introduce stochastic modeling methods and data analytics tools for analysis, design, and decision support for healthcare delivery systems. The aim is to expose students to various application areas related to hospital workflow and operations management in healthcare systems. Emphasis is placed on rigorous model formulation to solve system performance evaluation and decision-making questions in healthcare delivery systems. The application of Markov process, systems modeling, simulation, and data analytics methods are discussed through papers and case studies in different care settings and areas (e.g., hospital workflow, patient safety, clinical diagnosis and decision process, prediction and intervention).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IE 1201 - BIOMATERIALS AND BIOMANUFACTURING

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide students having a background in biomaterials and biomanufacturing with an opportunity to learn about the many modern aspect of biomaterials from basic science to clinical applications, across the formulations and chemistry of polymers, ceramics, metals and their use in various biomedical devices and implants, as well as their clinical performance and host responses. Students will also gain knowledge and experiences with designing and manufacturing biomedical devices through team projects. This one-semester, graduate course is intended for students majoring in the industrial engineering, or those who contemplating such a major (or minor). Students enrolled in the class should have an understanding of various biomaterials, and the ability to understand biological phenomena and manufacturing processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1202 - INTRODUCTION TO MEDICAL PRODUCT DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This is an undergrad/grad level course in medical product development covering fundamentals, regulatory processes, intellectual property management, and commercialization strategies. This course will provide basic knowledge on the development of medical devices including designing, manufacturing and testing medical devices. This course will also provide an overview of the medical product commercialization (i.e., bench to bedside). This course will develop the studentâs ability to select and properly use the biomaterials and manufacturing processes for developing medical devices, instruments, biomedical sensors and artificial organs. Students will also learn how to commercialize the medical products to the market through intellectual property management and regulatory processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IE 1301 - INTRODUCTION TO SAFETY ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Introduction to Safety Engineering"" provides a basis to assist students in understanding and applying the scientific and engineering principles associated with the field of safety engineering. Specifically, the course will provide a background in, information on and application exercises in the natural, chemical and physical laws and forces associated with safe design and implementation of work-related tasks and industrial and construction projects. These involve soils and excavation, trenching and shoring, permanent and temporary work platforms and scaffolding, cranes, rigging, ropes, slings and chains, fall protection, pressure vessels, confined space entry, energy isolation and preparation of equipment, hot work, welding, personal protective equipment and non-destructive testing. The course will also address safety related issues associated with building and facility design and layout, job, task and work setting layout. The course will stress the importance of safety engineering as part of both the corrective process and the design process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 1302 - ENGINEERING FOR PROCESS SAFETY

Minimum Credits: 3
Maximum Credits: 3
Engineering for process safety" provides for a basic understanding of the quantitative and qualitative analysis methods of process safety engineering and process safety management. The course also provides guidance in planning, implementing and managing an overall process safety management program. It includes coverage of such applicable science and engineering principles as risk, human reliability, fault logic, failure modes, incident cost and prediction. The course is presented in an applied format where several different types of industries are discussed such as oil and chemical, pharmaceuticals, defense, nuclear, aerospace, paper, information technology and manufacturing industries. Regulatory influence on process safety is discussed. Quantitative aspects of the course include application of risk analysis, fault tree analysis, hazard and operability analysis, vapor-cloud dispersion modeling, human reliability analysis, failure modes and effects analysis, etc. This course is also intended to provide a background in managing an overall system safety program and its application to several industries, therefore, cost and effectiveness measurement are covered in the material.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

IE 2012 - MANUFACTURE OF STRUCTURAL NANOMATERIALS

Minimum Credits: 3
Maximum Credits: 3
Description: this course covers contemporary research topics on the design and manufacture of nanostructured materials. In addition to design and manufacturing, this course would also emphasize the nanometer-scale phenomena that make nanostructured materials particularly attractive for structural applications. Topics such as dislocation theory, large strain plasticity phenomena, super plasticity and kinetics of coarsening will be discussed in the context of structural nanomaterials.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Industrial Engineering; PREQ: IE 2006

IE 2064 - DATA SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Data Science involves working with complicated and messy data to build prediction models for use in making decisions. This course covers data processing and exploratory data analysis; regression, classification, and clustering models; and model evaluation methods.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PLAN: Industrial Engineering; PREQ: IE 2005

IE 2082 - LINEAR OPTIMIZATION

Minimum Credits: 3
Maximum Credits: 3
Review of linear algebra, matrices and the simplex methods; revised simplex method; generalized bounds; product form of inverse; pricing and pivot selection; duality and sensitivity analysis; separable programming; linear complementarity; Dantzig-Wolfe decomposition; column generation; generalized LP; semi-infinite LP, stochastic LP; interior point methods.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Engineering students only.

IE 2088 - DIGITAL SYSTEMS SIMULATION

Minimum Credits: 3
Maximum Credits: 3
Nature of simulation; discrete event simulators; modeling complex systems; input data reduction; random number generation; output data analysis; validation of simulation models; experimental design; variance reduction techniques; comparing alternative systems; overview of simulation languages.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Engineering students only.

IE 2097 - FINANCIAL ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the structure of forwards, futures, swaps and options as financial instruments relating to the treatment of risk. Risk neutral pricing of these instruments will be studied assisted by principles of optimization with an added emphasis on engineering analysis, and an emphasis on "real world" applications of the "dervigem" software in accompanying CD to textbook.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Engineering students only.

IE 2186 - REINFORCEMENT LEARNING

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course on reinforcement learning (RL), a set of techniques used for learning sequential decision making policies from data. The basics of Markov decision processes necessary for RL will be covered, but a firm grasp of undergraduate level probability and basic programming ability (in Python and MATLAB) will be assumed. A wide range of methods (e.g., TD learning, Q-learning, policy gradients) that perform evaluation and control will be covered. The focus in this course will be on applications, implementation, intuition and some theory.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PREQ: IE 2005 or IE 1070 or Equivalent and IE 1082 PLAN: Industrial Engineering

IE 2725 - DESIGN FOR INJURY PREVENTION

Minimum Credits: 3
Maximum Credits: 3

This course provides instruction for how to design a workplace to prevent occupational injuries. The course will primarily focus on preventing the three types of injuries, the injury mechanism, risk factors, tools for quantifying risk and engineering solutions will be covered. Upon completion of a course, students will be expected to develop custom engineering design solutions to prevent occupational injuries. Students will complete a project where they will design a solution to eliminate or reduce an existing hazard.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade

Information Science

INFSCI 0009 - MATH FOR INFORMATION SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Basic mathematical concepts that are relevant to information science, including matrix operators, probability, graph theory, binary codes, and entropy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: USCI

INFSCI 0010 - INTRODUCTION TO INFORMATION, SYSTEMS AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Introduction to the concepts, principles, and skills of information science for students with no programming experience. Topics include: the need for information and the use of information, data collection, coding, storage and retrieval, information processing, information display, and the evaluation of information.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement

INFSCI 0012 - INTRODUCTION TO PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
Introduction to concepts, principles, and skills of programming, including compilers, algorithms, and problem solving using a high level programming language such as c. Intended for students with little or no programming experience who seek an information science major.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

INFSCI 0013 - COMPUTER METHODS IN HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the use of computational modeling and programming to conduct text-based research in the humanities. Course goals include 1) learning how to identify research questions in the humanities that are amenable to computational analysis and processing and 2) designing and implementing xml-based computational systems to explore those questions. No prior programming experience or knowledge of foreign languages required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

INFSCI 0014 - CYBERSECURITY AND THE LAW

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

INFSCI 0015 - DATA STRUCTURES AND PROGRAMMING TECHNIQUES

Minimum Credits: 3
Maximum Credits: 3
Definition, description, and implementation of several information structures such as linked lists, stacks, and queues, using a scientific programming language (e.g., C).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Information Science or Sch Computing and Information

INFSCI 0017 - FUNDAMENTALS OF OBJECT-ORIENTED PROGRAMMING

Minimum Credits: 4
Maximum Credits: 4
First programming course for is majors, designed for students with little or no programming experience. Basic principles and concepts of object-oriented programming using java. Classes, interfaces, operators, program control, arrays, testing, debugging, inheritance, polymorphism, and event handling. Techniques for simplifying the programming process and improving code quality. Activity-based learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: INFSCI 0010

INFSCI 0018 - FILE PROCESSING

Minimum Credits: 3
Maximum Credits: 3
The design of file organizations and their utilization in an integrated data processing system; utilizing COBOL programming language to implement sequential, indexed sequential, and random access file processing systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG:School Computing and Information or School of Information Science

INFSCI 0310 - COMPUTATION IN INFORMATION SCIENCE

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to introduce the mathematical and computational techniques used in information science with an emphasis on modeling and analysis of information technology (i.e., computers, data centers, communication networks). Topics course covers fundamental concepts, such as probability, statistical analysis of measurement data, matrix methods, graph theory, and simulation and modeling techniques. Also Covers Basic mathematical concepts that are relevant to information science, including matrix operators, probability, graph theory, binary codes, and entropy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0220 and (CMPINF 0401 or CS 0401 or INFSCI 0017); Minimum C grade or Transfer; Enrollment not permitted if previously enrolled in INFSCI 0009

INFSCI 0410 - HUMAN-CENTERED SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the study of the design and implementation of human-centered systems. Human-centered systems place the human at the center of the design process. This course will look at theoretical foundations and formal methods from a variety of fields including computer science, psychology and sociology; the actual design process, the dynamics associated with focusing on the individual, small groups and society; and may include selected special topics (instructor dependent) from the following: geospatial reasoning, mobile interaction, multimedia, ubiquitous computing, haptic interaction, virtual reality, wearable computing and sensor based systems.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: CMPINF 0401 or CS 0401 or INFSCI 0017; Minimum C grade or Transfer; Enrollment not permitted if previously enrolled in INFSCI 1044

INFSCI 0419 - PYTHON PROGRAMMING FOR DATA MANAGEMENT & ANALYTICS

Minimum Credits: 3
Maximum Credits: 3
This course will provide an introduction to programming, data processing, and data analytics using Python for highly motivated students with little or no prior experience in programming. The course will focus on learning the Python programming language in the context of working with data, planning and organizing programs, commonly-used algorithms, data management, data cleaning, and basic data mining.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or STAT 1000 or STAT 1100 or STAT 1151 or STAT 1152 or ENGR 0020 (Min grade C or Transfer)

INFSCI 0510 - DATA ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course will provide an introduction to programming, data processing, and data analytics using Python for highly motivated students with little or no prior experience in programming. The course will focus on learning the Python programming language in the context of working with data, planning and organizing programs, commonly-used algorithms, data management, data cleaning, basic machine learning, data mining, and fundamentals of computational modeling.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0310 or INFSCI 0009; Minimum C grade or Transfer; Enrollment not permitted if previously enrolled in INFSCI 0419

INFSCI 0530 - DECISION-MAKING IN SPORTS

Minimum Credits: 3
Maximum Credits: 3
Students will be introduced to concepts related to data collection, data quality, data analysis and modeling, as well as data visualization, through the context of sports analytics. Data and analytics have been part of the sports industry dating to the 1870s, when the first boxscore in baseball was recorded. Recently, advanced data mining and machine learning techniques have been incorporated into the operations of sports franchises. In this course, students will become familiar with data science concepts and data analysis techniques, the interpretation and use of probabilities, the notion of overfitting and how to avoid it, and the components of a useful visualization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

INFSCI 0610 - NETWORKS AND INFORMATION

Minimum Credits: 3
Maximum Credits: 3
Networks are present in most aspects of our lives. On a daily basis, we rely on communication networks to get our work done, on transportation networks to travel around the city or aroundthe world, and on social networks (both physical and virtual) for our well being. There are many other ways in which networks enter our lives in visible and invisible ways. This course is an introductory look into the science of networks and how that science affects us in what we do. As a result, we will study some of the basic ideas that emerge out of network science with a particular attention to the ways in which these ideas arise in the networks that touch our lives on a regular basis. One of the principal types of networks that we will study will be computer communications networks. Thus, a secondary goal of this course is to introduce students to some of the principal ideas and technologies in computer networks.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0310 or INFSCI 0009; Minimum C grade or Transfer; Enrollment not permitted if previously enrolled in INFSCI 1070

INFSCI 1012 - LISP AND SYMBOLIC PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
Introduction to the lisp programming language and the basic concepts of symbolic programming. Programming examples include several basic techniques used in artificial intelligence such as: search in a symbolic problem space, the use of rule based inference systems, and the representation of knowledge in frames.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Information Science or Sch Computing and Information

INFSCI 1014 - GRAPHICS

Minimum Credits: 3
Maximum Credits: 3
Techniques for producing graphical displays using computers. How to design and create computer graphics. Overview of artistic and technical knowledge needed to create graphics. What makes a good graphical display will be investigated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0017 or 0015 or CS 0401

INFSCI 1017 - IMPLEMENTATION OF INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Second programming course for is majors. Advanced java language features required for professional software development. Data structures, oo design, graphical user interfaces, exception handling, multithreading, i/o, web and network programming.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0017 or 0015 or CS 0401; CREQ: INFSCI 1022

INFSCI 1021 - TRENDS IN INFORMATION TECHNOLOGY MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: USCI

INFSCI 1022 - DATABASE MANAGEMENT SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
The design, implementation, and utilization of database management systems. Contrasts the methodologies of file systems, data management systems, and database management systems. Various data structures (e.g., Tree, network, linked list) and several database models (e.g., The Codasyl database task group model and the relational database model). Administrative tasks required in database management are considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: INFSCI 0010

INFSCI 1023 - INNOVATION & ENTREPRENEURSHIP IN INFORMATION TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: USCI
Course Attributes: SCI Expression: Communication General Ed. Req.

INFSCI 1024 - ANALYSIS OF INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course provides state-of-the-art skills in requirements management and scope management, which is critical for successful IT projects. Topics include best practices in eliciting, documenting, verifying and modeling requirements. This is an active learning course where students develop an analysis model for a realistic IT project which can serve as a foundation for INFSCI 1017 and INFSCI 1025. The analysis model is suitable for inclusion in the student's IT portfolio.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0010

INFSCI 1025 - DESIGN OF INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Object-oriented design best practices; principles of system architecture; design patterns; requirements traceability; construction of UML-compliant models (class, sequence, communication and package diagrams); refactoring; iterative development of system prototype. Requires knowledge of fundamental oo programming concepts including abstract classes, interfaces, inheritance, polymorphism, and message passing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0017 OR 0015 or CS 0401) and INFSCI 1024; CREQ: INFSCI 1022

INFSCI 1027 - IT PROJECT MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Project management is the discipline to manage and oversee a project from inception to completion. As more and more organizations look to launch highly competitive and disruptive technologies in the marketplace, it's critical that you can apply these methodologies, tools, and techniques to successfully manage an IT project to completion. In this course, you will acquire a working knowledge of the two more widely used project management methodologies (Agile and Waterfall) and gain hands-on experience by working through real world case studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREREQ: INFSCI 1024

INFSCI 1028 - GOING DIGITAL: TRANSFORMATIONAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
New digital tools are disrupting traditional business models, forcing organizations to develop new business models and strategies that not only strengthen capabilities and drive growth, but also provide a significant competitive advantage. IT business analysts and consultants are uniquely positioned to help organizations integrate these initiatives to solve their most pressing business problems. This course is designed to build IT consulting skills that enhance critical thinking, problem solving, written and oral communication, and presentation capabilities. The course is taught through a combination of lecture, class discussions, case studies and team based projects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

INFSCI 1029 - BUSINESS ESSENTIALS FOR THE IT PROFESSIONAL

Minimum Credits: 3
Maximum Credits: 3
Changing forces in the marketplace, along with the emergence of cloud computing and smart devices, have dramatically changed the "IT landscape". These changes are having a profound impact on the industry creating extraordinary opportunities as well as unprecedented challenges for IT professionals. As an IT professional, being able to adapt to this new landscape and emerge a stronger leader requires a unique approach, as well as a unique set of decision making skills. This course will enable you to strengthen your skills in problem solving, risk management, and consultative selling which are tools needed for successful decision making.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1024

INFSCI 1031 - GOING DIGITAL: TRANSFORMATIONAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
New digital tools are disrupting traditional business models, forcing organizations to develop new business models and strategies that not only strengthen capabilities and drive growth, but also provide a significant competitive advantage. IT business analysts and consultants are uniquely positioned to help organizations integrate these initiatives to solve their most pressing business problems. This course is designed to build IT consulting skills that enhance critical thinking, problem solving, written and oral communication, and presentation capabilities. The course is taught through a combination of lecture, class discussions, case studies and team based projects.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1024

INFSCI 1032 - ONLINE RETRIEVAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
An introduction to hardware, software, and other resources required for interactive system development and the searching capabilities of an interactive textual retrieval system. Dialog, BRS and various CD-ROMs are presented as models of interactive textual retrieval systems. Students will create small databases utilizing available software.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Information Science or Sch Computing and Information

INFSCI 1038 - MANAGEMENT INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
To provide students with an appreciation of the actual working environment of the typical misdepartment within the business community, including organizational structure and communication, budgeting issues, personnel issues, equipment acquisition and installation, planning for daily operations, and system evaluation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Information Science or Sch Computing and Information

INFSCI 1040 - INTRODUCTION TO DATA ANALYTICS

Minimum Credits: 3
Maximum Credits: 3
The ability to collect, store and process large amounts of detailed data in a variety of fields has led to a surge in the use of data in various decision-making tasks, ranging from governmental policy-making to drafting players in sports. Data literacy is thus important and in this first introductory course, we will focus on shifting the traditional mode of deterministic (yes/no) thinking to probabilistic thinking. We will see concepts from applied probability and statistics, while we will also explore a variety of data analysis methods including linear regression, matrix factorization, and network analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0019

INFSCI 1044 - HUMAN FACTORS IN SYSTEM DESIGN

Minimum Credits: 3
Maximum Credits: 3
Examines human-machine designs with special emphasis on human-computer interaction. Topics center on how to analyze, create, and improve equipment and environment to be compatible with human capabilities and expectations.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: INFSCI 0010

INFSCI 1049 - INTRODUCTION TO INFORMATION SECURITY

Minimum Credits: 3
Maximum Credits: 3
Introductory information security and privacy course for students outside of the BSIS/MSIS/MST majors. Covers fundamental issues and first principles of security and information assurance, including security policies, models and mechanisms related to confidentiality, integrity, authentication, identification, and availability issues related to information and information systems. The course will introduce students to risk management, security assurance, secure design principles, organizational security policy, legal and ethical issues in security, and standards and methodologies for security evaluation and certification.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: ANTI-req: Plans cannot be ISCI-BS, CSCI-BS, or INFSYS-CR1

INFSCI 1050 - BEHAVIORAL MODELS

Minimum Credits: 3
Maximum Credits: 3
Examines the roles of models and theories in science, and surveys several approaches to modeling cognitive and behavioral phenomena. Topics include: mathematical modeling, representational modeling, expert/novice differences and user models, psychological and computer simulation methods, the roles of analogy, metaphor, learning, and other cognitive processes in the development and use of cognitive models, and the role of models in the development of science and scientific theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Information Science or Sch Computing and Information

INFSCI 1052 - USER CENTERED DESIGN

Minimum Credits: 3
Maximum Credits: 3
Introduces principles and programming of interactive systems. Interaction techniques are surveyed and incorporated in the design of interfaces.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1044

INFSCI 1059 - WEB PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the PHP scripting language. Students will download and install the apache web server, PHP, and MYSQL database. In addition, PHP installation in the sis labs will be utilized. The course will cover programming concepts, client server architecture, database access and XHTMLl/cascading style sheets. Students will write a full scale web application as their final project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (INFSCI 0017 or 0015 or CS 401) and INFSCI 1022; LVL: Jr or Sr; PROG: School of Information Sciences or Sch Computing and Information
Course Attributes: Capstone Course

INFSCI 1060 - GAME DESIGN

Minimum Credits: 3
Maximum Credits: 3
Games have become ubiquitous in our modern world. In addition to entertainment, elements of games are present in everything from promotional advertisements to university classrooms. This course focuses on the exploration of game design in its many permutations. Join us as we critique and design all manner of entertainment and serious game. The class itself is designed as a multiplayer game experience to immerse and engage the

student in game design on a fundamental level. One of the final goals of this class is for each student to have designed two separate games in their entirety. These games may be useful in the follow up course: INFSCI 1061: Game Implementation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0017 or CS 0401) and INFSCI 1022 and INFSCI 1027; PROG: Sch Computing and Information (USCI)

INFSCI 1061 - GAME IMPLEMENTATION

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the digital game design and development process using the Unity 3D platform. Students will develop skills in scripting, user interface design, storytelling, and animation, as well as gain technical knowledge required to program, optimize, and deploy games for multiple platforms/devices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0017 or CS 0401) and INFSCI 1022

INFSCI 1068 - GEOSPATIAL INFORMATION SYSTEMS (GIS)

Minimum Credits: 3
Maximum Credits: 3
Introduction to geographic information system (GIS) concept and technology including spatial data sources, spatial data models and structures, spatial database management, map projection systems, geocoding and Georeferencing, spatial analysis, spatial data visualization (maps), GIS applications (e.g., Address-location finding, navigation, routing), and commercial GIS software packages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0017 or 0015 or CS 0401) and INFSCI 1022

INFSCI 1070 - INTRODUCTION TO TELECOMMUNICATIONS AND NETWORKS

Minimum Credits: 3
Maximum Credits: 3
Introduction to telecommunications and networks. Top-down orientation relates networking technologies to organizational goals and needs. Data communications and internet technologies and basic system performance analysis. TCP/IP, lans, wans, internetworking, and signals and communications media.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: INFSCI 0010

INFSCI 1071 - APPLICATIONS OF NETWORKS

Minimum Credits: 3
Maximum Credits: 3
Second course in telecommunications and networks. Network architecture, protocols, performance, design, and analysis based on application needs, organizational requirements, user requirements, and performance objectives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0017 or 0015 or INFSCI 0401) and (INFSCI 1070 or 1004)

INFSCI 1072 - INTRODUCTION TO WIRELESS NETWORKS

Minimum Credits: 3
Maximum Credits: 3
Introductory broad overview for students with a basic background in telecommunications. Not for telecom majors. Principles of wireless communications and how they differ from wired communications. Fundamental concepts including: transmission and mitigation techniques (e.g., Modulation and coding, propagation, interference and antennas) for wireless systems, multiplexing techniques, wireless system architectures, mobility management, security, protocols and location technology. Systems include: cellular phone networks (e.g., Cdma2000, umts), wireless local

area networks (e.g., Ieee 802.11G), personal area networks (e.g., Bluetooth), fixed point broadband wireless (e.g., WiMAX) and satellite systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1070 or 1004

INFSCI 1073 - APPLICATION DEVELOPMENT FOR MOBILE DEVICES

Minimum Credits: 3
Maximum Credits: 3
Learn how to solve real-world problems and experience the satisfaction of seeing a project through from start to finish. Gain hands-on experience working directly with clients and observe how senior leaders make difficult decisions. Build skills in requirements gathering, scope management and stakeholder management. Strengthen project management and interpersonal skills by working in a team based setting under the guidance of faculty. Performance will be evaluated and graded based on the overall project success and assessments from the client, faculty and student peer reviews.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0017 or 0015 or CS 0401) and INFSCI 1052

INFSCI 1074 - COMPUTER SECURITY

Minimum Credits: 3
Maximum Credits: 3
Overview of information security. Principles of security including confidentiality, integrity, and availability. Operating systems and database security concepts. Basic cryptography and network security concepts. Secure software design and application security. Evaluation standards, security management. Social, legal and ethical issues. Human factors in security.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: College in High School - UGRD - students only.

INFSCI 1075 - NETWORK SECURITY

Minimum Credits: 3
Maximum Credits: 3
Network security and cryptographic protocols. Network vulnerabilities, attacks on TCP/IP, network monitoring, security at the link, network and transport layers. Cryptography, e.g., Secret and public key schemes, message authentication codes and key management. Wlan security, ipsec, ssl, and vpns. E-mail security (pgp, s/mime); kerberos; x.509 Certificates; AAA and mobile IP; SNMP security; firewalls; filters and gateways. Policies and implementation of firewall policies; stateful firewalls; firewall appliances. Network related physical security, risk management and disaster recovery/contingency planning issues and housekeeping procedures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0017 or 0015 or CS 0401) and (INFSCI 1004 or 1070)

INFSCI 1077 - NETWORK ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Analysis of network traffic and flows and network management. Methods and tools for monitoring and analyzing network traffic and performance including data mining and visualization. Techniques of planning, controlling, organizing, and decision making for a communications work; accounting, security, fault management, configuration, and maintenance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1070 and STAT 0200; PROG: School of Information Science or Sch Computing and Information

INFSCI 1079 - COMPUTER NETWORKING LABORATORY

Minimum Credits: 3
Maximum Credits: 3
The objective of this lab-based course is to gain knowledge of fundamental computer networking issues through hands-on experiments with network

equipment and services. The sequence of labs start at the physical layer and progress up the protocol stack to the application layer. Topics covered are signal generation and analysis at the physical layer, ethernet and wlan performance and management, ip address planning and management, ip router configuration including rip, ospf, bgp, mpls protocols, tcp connection control, stateful packet filtering, network monitoring and management, signaling protocols for voip services, and web-based services configuration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: INFSCI 1070 and 1071; PROG: School of Information Sciences or Sch Computing and Information

INFSCI 1080 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Development of readings, research, and practical implementation of a system or other forms of study as arranged between student and instructor.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Information Sciences or Sch Computing and Information; LVL: Jr or Sr

INFSCI 1081 - TEAM-BASED CAPSTONE PROJECT

Minimum Credits: 1
Maximum Credits: 3
Learn how to solve real-world problems and experience the satisfaction of seeing a project through from start to finish. Gain hands-on experience working directly with clients and observe how senior leaders make difficult decisions. Build skills in requirements gathering, scope management and stakeholder management. Strengthen project management and interpersonal skills by working in a team based setting under the guidance of faculty. Performance will be evaluated and graded based on the overall project success and assessments from the client, faculty and student peer reviews
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

INFSCI 1082 - INFORMATION SCIENCE COOPERATIVE PROGRAM

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Attributes: Capstone Course

INFSCI 1085 - INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
Supervised work in an information environment providing a frame of reference for understanding and an opportunity to apply the skills, methodologies, and theories presented in information science courses.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit
Course Requirements: PROG: School of Information Sciences or Sch Computing and Information; LVL: Jr or Sr

INFSCI 1090 - SPECIAL TOPICS: PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
Advanced class focusing on current or specialized topic in programming area.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: Jr or Sr; PROG: School of Information Sciences or Sch Computing and Information

INFSCI 1091 - SPECIAL TOPICS: BEHAVIORAL

Minimum Credits: 3
Maximum Credits: 3
Advanced class focusing on current or specialized topic in behavioral area.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

INFSCI 1092 - SPECIAL TOPICS: SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Advanced class focusing on current or specialized topic in systems area.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: Jr or Sr; PROG: School of Information Science or Sch Computing and Information

INFSCI 1100 - STUDY ABROAD

Minimum Credits: 1
Maximum Credits: 15
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

INFSCI 1399 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Advanced class focusing on a current or specialized topic in Information Science
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: Jr or Sr; PROG: Sch Computing and Information

INFSCI 1400 - ANALYSIS OF INFORMATION SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course provides state-of-the-art skills in requirements management and scope management, which is critical for successful IT projects. Topics include best practices in eliciting, documenting, verifying and modeling requirements. This is an active learning course where students develop an analysis model for a realistic IT project which can serve as a foundation for an analysis model that is suitable for inclusion in the student's IT portfolio.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0410 or INFSCI 1044; Minimum C grade or Transfer; Enrollment not permitted if previously enrolled in INFSCI 1024

INFSCI 1420 - USER-CENTERED DESIGN

Minimum Credits: 3
Maximum Credits: 3
Introduces principles and programming of interactive systems. Interaction techniques are surveyed and incorporated into the design of interfaces.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: INFSCI 0410 or INFSCI 1044; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1052

INFSCI 1430 - USER EXPERIENCE ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course presents the fundamental principles of user experience (UX) engineering across three broad categories of designs and products - digital products, virtual worlds, and physical spaces. This course will cover a broad range of topics, including specifying, designing, and evaluating user experiences, understanding the role of user experience in the design of digital products, virtual environments, and physical spaces, and the roles of psychology, sociology, and psychometrics in user experience design. This is an active learning course where students will be expected to read research papers, participate in class discussions, and work with external stakeholders.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0410 or INFSCI 1044) and (INFSCI 0510 or INFSCI 0419 or INFSCI 0019); Minimum C grade or Transfer

INFSCI 1440 - SOCIAL COMPUTING

Minimum Credits: 3
Maximum Credits: 3
This course focuses on how social groups form and evolve, how members of these groups interact with each other, and how these groups are supported and augmented with computer systems. The course is interdisciplinary, drawing from the fields of computer science, psychology, and sociology. It covers key theories and technologies of social computing in terms of (1) computer systems supporting social behavior and (2) socially intelligent computing carried out by groups. Students will have a chance to explore social computing systems, get experience with social data analyses and focus on design, and evaluation of a social software as their final project for the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0410 or INFSCI 1044) and (INFSCI 0510 or INFSCI 0419 or INFSCI 0019) and (INFSCI 0610 or INFSCI 1070); Min C grade or Transfer.

INFSCI 1450 - GAME DESIGN

Minimum Credits: 3
Maximum Credits: 3
Games have become ubiquitous in our modern world. In addition to entertainment, elements of games are present in everything from promotional advertisements to university classrooms. This course focuses on the exploration of game design in its many permutations. Join us as we critique and design all manner of entertainment and serious game. The class itself is designed as a multiplayer game experience to immerse and engage the student in game design on a fundamental level. One of the final goals of this class is for each student to have designed two separate games in their entirety. These games may be useful in the follow-up course, Immersive Media Technologies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0410 or INFSCI 1044; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1060

INFSCI 1460 - IT PROJECT MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Project management is the discipline to manage and oversee a project from inception to completion. As more and more organizations look to launch highly competitive and disruptive technologies in the marketplace, it's critical that you can apply these methodologies, tools, and techniques to successfully manage an IT project to completion. In this course, you will acquire a working knowledge of the two more widely used project management methodologies (Agile and Waterfall) and gain hands-on experience by working through real world case studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1400 or INFSCI 1024; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1027

INFSCI 1470 - IMMERSIVE MEDIA TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3

This course will introduce students to the design and development of immersive media technologies, such as interactive narratives, digital games, augmented/mixed reality and virtual reality experiences. Students will develop skills in user experience design, user interface design, storytelling, and animation, as well as gain technical knowledge required to program, optimize, and deploy media experiences for multiple platforms/devices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0410 or INFSCI 1044) and (INFSCI 0510 or INFSCI 0419 or INFSCI 0019) and (INFSCI 0610 or INFSCI 1070); Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1061

INFSCI 1499 - SPECIAL TOPICS: HUMAN-CENTERED

Minimum Credits: 3
Maximum Credits: 3
Advanced class focusing on a current or specialized topic in the Human Centered Computing and Systems areas in Information Science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: Jr or Sr; PROG: Sch Computing and Information

INFSCI 1500 - DATABASE MANAGEMENT CONCEPTS AND APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the practical methodologies of data design, management, storage, and retrieval in the context of relational database management systems. This course covers fundamental concepts of effective database development process, including entity-relationship model, normalization, structured query language (SQL), basics of transaction management and physical database design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0510 or INFSCI 0419 or INFSCI 0019) or (CMPINF 0401 or CS 0401 or INFSCI 0017); Minimum C grade or Transfer; Enrollment not permitted if previously enrolled in INFSCI 1022

INFSCI 1520 - INFORMATION VISUALIZATION

Minimum Credits: 3
Maximum Credits: 3
Visualization is a way to explore, present, and express meaning in data, so there is no visualization without data. This course aims to investigate what data presents and how to present data, which requires both data analytics and information design knowledge. In this course, we will introduce concepts, methods and procedures of data visualization, with emphasis on the creative process of organizing, visualizing, communicating and interacting information. The course is designed to help students develop critical thinking for evaluating visualization system and practical skills in solving visualization problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0410 or INFSCI 1044) and (INFSCI 0510 or INFSCI 0419 or INFSCI 0019) and (INFSCI 0610 or INFSCI 1070); Min C grade or Transfer

INFSCI 1525 - CURATING DIGITAL DATA

Minimum Credits: 3
Maximum Credits: 3
"Data curation" is the management and preservation of data, information and systems for the long-term. While ensuring the longevity of information was once the role of librarians and archivists, long-term access and persistence of digital information is dependent on intentional planning and ongoing stewardship by information creators and managers. In the BSIS program, we encounter aspects of data curation in a number of courses. This course will complement and round out your skills and understandings of data curation by exploring fundamental principles, processes, and practices for curating information during its active use and for the long-term. We will address the technical, social, ethical, and legal issues associated with curation of digital data in three sectors: government, corporate, and academic. Finally, we will apply our data curation fundamentals to specific information object types.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: School of Computing and Information

INFSCI 1530 - DATA MINING

Minimum Credits: 3
Maximum Credits: 3
The ability to collect, store and process large amounts of detailed data in a variety of fields has led to a surge in the use of data in various decision-making tasks, ranging from governmental policy-making to drafting players in sports. Data literacy is thus important and in this first introductory course, we will focus on shifting the traditional mode of deterministic (yes/no) thinking to probabilistic thinking. We will see concepts from applied probability and statistics, while we will also explore a variety of data analysis methods including linear regression, matrix factorization, and network analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [(INFSCI 0510 and MATH 0280)] or (INFSCI 0019 or INFSCI 0419); Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1040

INFSCI 1540 - DATA ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to introduce major data engineering concepts and techniques. Data engineering utilizes methods of business intelligence and advanced data processing to implement scalable and distributed data ecosystems. Data engineers are focused on building tools, infrastructures, frameworks, and services that support large-scale data analytics. Therefore, data engineering forms a highly acclaimed discipline at the cutting edges of data science and software engineering. The course introduces and organizes data engineering aspects around the data processing pipeline. It covers key concepts of data acquisition, data storage and retrieval, data modeling, data warehousing, data integration, data fusion, as well as distributed and scalable data management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1500 or INFSCI 1022; Minimum C grade or Transfer

INFSCI 1550 - SPATIAL INFORMATION

Minimum Credits: 3
Maximum Credits: 3
Introduction to geographic information system (GIS) concept and technology including spatial data sources, spatial data models and structures, spatial database management, map projection systems, geocoding and Georeferencing, spatial analysis, spatial data visualization (maps), GIS applications (e.g., Address-location finding, navigation, routing), and commercial GIS software packages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1500 or INFSCI 1022; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1068

INFSCI 1560 - INFORMATION STORAGE AND RETRIEVAL

Minimum Credits: 3
Maximum Credits: 3
Problems and techniques related to storing and accessing unstructured information with an emphasis on textual information. Overview of several approaches to information access with a primary focus on search-based information access. Covers automated retrieval system design, content analysis, retrieval models, result presentation, and system evaluation. Examines applications of retrieval techniques on the web, in multimedia and multilingual environments, and in-text classification and event tracking.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1500 or INFSCI 1022; min C grade or Transfer.

INFSCI 1570 - NETWORK AND WEB DATA TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3
This course is about the core technologies and standards for web based distributed systems that we use to build Web applications. It includes an overview of the standardization process and the standards organizations. The course will introduce client and server-side technologies for the web

with emphasis on front-end technologies such as HTML5, JavaScript, CSS, responsive design etc. and a set of back-end technologies and APIs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0410 or INFSCI 1044) and (INFSCI 0510 or INFSCI 0419 or INFSCI 0019) and (INFSCI 0610 or INFSCI 1070); MIN GRADE 'C' or Transfer FOR ALL COURSES LISTED

INFSCI 1599 - SPECIAL TOPICS: DATA AND INFORMATION

Minimum Credits: 3
Maximum Credits: 3
Advanced class focusing on a current or specialized topic in the Data and Information areas in Information Science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: Jr or Sr; PROG: Sch Computing and Information

INFSCI 1600 - SECURITY AND PRIVACY

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to provide an understanding of information security ranging from threats, vulnerabilities, and attacks to protection, detection, and response. Students will develop the ability to converse with the terminology used in information security (e.g., confidentiality, authentication, integrity, availability). The course will cover the basics of security issues in operating systems, applications, and databases. This is followed by an examination of the architecture and generalized protocol/operational aspects of information networks to identify how security attacks (e.g., denial of service) are possible. Basics of security mechanisms such as cryptography, firewalls, and secure protocols for networks will be presented. The course will include a discussion of privacy and human factors in security (e.g., usable security).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 0610 or INFSCI 1070; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1075

INFSCI 1620 - ADVANCED SECURITY AND PRIVACY

Minimum Credits: 3
Maximum Credits: 3
Network security and cryptographic protocols. Network vulnerabilities, attacks on TCP/IP, network monitoring, security at the link, network and transport layers. Cryptography, e.g., Secret and public key schemes, message authentication codes and key management. WLAN security, IPsec, SSL, and VPNs. E-mail security (PGP, s/mime); Kerberos; x.509 Certificates; AAA and mobile IP; SNMP security; firewalls; filters and gateways. Policies and implementation of firewall policies; stateful firewalls; firewall appliances. Network related physical security, risk management, and disaster recovery/contingency planning issues and housekeeping procedures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1600 or INFSCI 1070; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1074

INFSCI 1630 - COMMUNICATION NETWORKS

Minimum Credits: 3
Maximum Credits: 3
The focus of this course is on the Internet â the most widely-used communication network. Provides an introduction to data communications and networking, particularly examining elements of today's Internet. Students will learn how applications are supported and communicated through services offered by the Internet. Covers features of transport layer protocols, routing protocols, and medium access protocols. Also, the course will explore physical layer technologies and provide a basic introduction to multimedia networking and network management concepts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1600 or INFSCI 1070; Minimum C grade or Transfer, and Enrollment not permitted if currently or previously completed INFSCI 1071

INFSCI 1640 - WIRELESS NETWORKS

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to provide an understanding of various wireless networking technologies ranging from cellular networks to wireless personal area networks and IoT, including how they differ from wired networks (e.g., signal transmission, interference, medium access, mobility, etc.). Emphasis is on most recent generations of wireless networks. The course will cover the architecture and generalized protocol/operational aspects of cellular networks or wireless wide area networks, wireless local area networks, and wireless personal area networks. Deployment issues, mobility, and radio resource management will be discussed. Physical layer concepts are provided as necessary. Localization and security issues in wireless networks will also be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 1600 and MATH 0280) or INFSCI 1070 ; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1072

INFSCI 1650 - MULTIMEDIA COMMUNICATIONS

Minimum Credits: 3
Maximum Credits: 3
This course will provide students with an introduction to multimedia communications (audio, video, immersive) over data communication networks. It will explore multimedia applications and encoding, quality assessment, systems for transmission and distribution of multimedia, performance, challenges to building networks for content delivery, and designing them for future types of content that might result from advances in virtual reality, robotic manipulation, and immersive experiences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 0410 or INFSCI 1044) and (INFSCI 0510 or INFSCI 0419 or INFSCI 0019) and (INFSCI 0610 or INFSCI 1070); Minimum C grade or Transfer

INFSCI 1660 - COMPUTER NETWORKING LABORATORY

Minimum Credits: 3
Maximum Credits: 3
The objective of this lab-based course is to gain knowledge of fundamental computer networking issues through hands-on experiments with network equipment and services. The sequence of labs start at the physical layer and progress up the protocol stack to the application layer. Topics covered are signal generation and analysis at the physical layer, ethernet and WLAN performance and management, IP address planning and management, IP router configuration including rip, OSPF, BGP, Mpls protocols, TCP connection control, stateful packet filtering, network monitoring and management, signaling protocols for VoIP services, and web-based services configuration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: INFSCI 1600 or INFSCI 1070; Minimum C grade or Transfer; and Enrollment not permitted if currently or previously completed INFSCI 1079

INFSCI 1670 - SECURITY MANAGEMENT AND COMPUTER FORENSICS

Minimum Credits: 3
Maximum Credits: 3
This course covers issues related to administration and management of security of enterprise information systems and networks. Topics include intrusion detection systems, vulnerability analysis, anomaly detection, computer forensics, application logging, auditing and data management, risk management, contingency planning and incident handling, cyber defense/operations, and security program management and lifecyle. The course will study in detail principles and tools related to these topics. The course will also cover security standards, evaluation, accreditation and certification process; security planning, compliance issues ethical and legal issues in information; privacy, traceability and cyber-evidence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (INFSCI 1400 or INFSCI 1024) and (INFSCI 1500 or INFSCI 1022) and (INFSCI 1600 or INFSCI 1070); MIN C GRADE OR TRANSFER

INFSCI 1690 - CLOUD COMPUTING

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the concepts and design principles behind existing cloud solutions. Topics include large scale data processing techniques such as mapreduce/hadoop and its related ecosystem, overview of virtualized commercial cloud models, system virtualization, hypervisors and virtualized platforms. Design of cloud storage systems such as key-value stores and geographically distributed storage systems. Introduction to security and privacy issues in cloud computing, issues of data and execution privacy in modern commercial cloud services.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ:(INFSCI 1400 or INFSCI 1024) and (INFSCI 1500 or INFSCI 1022) and (INFSCI 1600 or INFSCI 1070); MIN GRADE C OR TRANSFER

INFSCI 1699 - SPECIAL TOPICS: NETWORKS AND SECURITY

Minimum Credits: 3
Maximum Credits: 3
Advanced class focusing on a current or specialized topic in the networks and security areas in Information Science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL: Jr or Sr; PROG: Sch Computing and Information

INFSCI 1700 - DATA-DRIVEN COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
Digital transformation is disrupting traditional business models, enabling organizations to not only increase client value, but develop entirely new business models that drive exponential growth and deliver a significant competitive advantage. Harnessing this technology requires the ability to be better problem solvers and transform data into answers. In this course, students will build upon their problem solving, data analytics, and communication skills. They will learn how to translate complex technical topics into actionable insights, leverage storytelling to influence and persuade, and visualize data for impact. In summary, students will use advanced information economics, data, their knowledge of human-centered systems, and include digital transformation in organizations and communities for ideation and communication to diverse audiences. This course may serve as a capstone for students in the Information Science major.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: 90 Credits or Career Level = Senior

INFSCI 1720 - INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
Supervised work in an information environment providing a frame of reference for understanding and an opportunity to apply the skills, methodologies, and theories presented in information science courses.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: Enrollment not permitted if currently or previously completed INFSCI 1085

INFSCI 1730 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study is a student-initiated experience undertaken with faculty supervision. The experience is designed to permit students to pursue an area of interest in Information Science, focusing on more in-depth study of theory and concepts or system/application design and implementation. As part of this independent study course, students will either develop a paper based on scholarly readings, or a practical implementation of a system or product. The course will promote understanding of and experience with, academic research including search and retrieval skills, writing skills, and the ability to synthesize and develop a conclusion on a subject topic that is related to the information science degree. With the development of a system, students will gain a deeper understanding of the product cycle, from idea and conceptualization to implementation.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

INFSCI 1740 - TEAM-BASED CAPSTONE PROJECT

Minimum Credits: 3
Maximum Credits: 3
Learn how to solve real-world problems and experience the satisfaction of seeing a project through from start to finish. Gain hands-on experience working directly with clients and observe how senior leaders make difficult decisions. Build skills in requirements gathering, scope management and stakeholder management. Strengthen project management and interpersonal skills by working in a team-based setting under the guidance of faculty. Performance will be evaluated and graded based on the overall project success and assessments from the client, faculty and student peer reviews.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Enrollment not permitted if previously enrolled in INFSCI 1081

Instruction and Learning

IL 0210 - COLLEGE READING & STUDY SKILLS

Minimum Credits: 3
Maximum Credits: 3
This is a computer based course designed to provide assistance for students in achieving academic success. Course content includes self-management, vocabulary development, reading comprehension, study strategies, and preparation for examinations. Additionally, students study and practice using online databases and other resources.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

IL 1000 - INTRODUCTION TO TEACHING

Minimum Credits: 3
Maximum Credits: 3
Introduction to teaching explores contemporary perspectives of education. It provides a basic introduction to instructional planning, curriculum, and classroom management. Additionally, the class provides opportunities for practice of proven teaching strategies designed to meet individual student needs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1008 - STEAM: INSTRUCTIONAL DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the instructional content of STEAM, which includes subject-matter alignment (the ways in which teachers present material from multiple disciplines or content areas in clear and connected ways), discipline integration (the selection of material across disciplines - including concepts, methods, and approaches - as well as how they are synthesized to support deeper learning), and ways to employ problem-solving skills. These skills include cognitive skills (modeling, analyzing, interpreting), collaborative skills (communication, problem-solving), and creative skills (designing, creating) necessary for 21st century learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1041 - INTRO TO EARLY CHILDHOOD ED

Minimum Credits: 3
Maximum Credits: 3
The course is a general introduction to the theoretical, political, economic, and social issues that are inherent in the conduct and development of services for young children. The primary thrust is intended to provide students with both an overview of current issues and a basis for assessment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1042 - LANGUAGE AND LITERATURE FOR THE YOUNG CHILD

Minimum Credits: 3
Maximum Credits: 3
An introduction to language and literacy for children birth through grade 4. Includes applied theories and stages of language development, transitions from oral to written expression, family literacy, and guidelines for the selection and use of quality literature.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

IL 1045 - YOUNG ENGLISH LANGUAGE LEARNERS

Minimum Credits: 3
Maximum Credits: 3
Prospective early childhood education teachers will identify, investigate and assess impacts of a variety of social agencies, organizations and current issues in early child hood education through planned interviews as well as class lectures, discussions and reports.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1047 - INTEGRATED CURRICULUM PRE-K - 4

Minimum Credits: 3
Maximum Credits: 3
Engagement with general and specific issues related to the development of content and lessons that cross a broad range of curricular areas for children in pre-k through grade 4.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1049 - SEMINAR RELATED TO PRE-STUDENT TEACHING PRE-K

Minimum Credits: 1
Maximum Credits: 1
This a weekly seminar that supports students during their pre-k practicum. This course is designed to facilitate student learning as they make connections between theory and practice. Students will receive guidance in the completion of required field practicum competencies and the preparation of the on-line pre-k portfolio.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

IL 1208 - READING/WRITING METHODS 1: PRE-KINDERGARTEN - GRADE 1

Minimum Credits: 3
Maximum Credits: 3
This course is intended for teacher candidates who are pursuing prek-4 certification. It is the first in a two-course sequence that focuses on classroom teaching methods for literacy. It is also part of a set of courses that focus on literacy development and instruction. Other courses in the set include reading/writing methods 2: grades 2-4, language and literature for the young child, and literacy assessment and instruction for children with disabilities in inclusive settings. Teacher candidates in reading/writing methods 1 will have opportunities to build their knowledge about specific aspects of literacy, including: (a) oral language development, (b) emergent literacy, (c) concepts about print, (d) comprehension, and (e) writing. In addition, candidates will learn about specific instructional approaches and resources for supporting students in developing those aspects of literacy in pre-kindergarten - grade 1.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1209 - READING/WRITING METHODS 2: GRADES 2-4

Minimum Credits: 3
Maximum Credits: 3
This course is intended for teacher candidates who are pursuing prek-4 certification. It is the second in a two-course sequence and builds on concepts introduced in reading/writing methods 1. It is also part of set of courses that focus on literacy development and instruction. Other courses in the set include language and literature for the young child, and literacy assessment and instruction for children with disabilities in inclusive settings. Teacher candidates in reading/writing methods 2 will have opportunities to build their knowledge about specific aspects of literacy, including: (a) word study-

-decoding, spelling, and vocabulary, (b) comprehension, and (d) composition, including handwriting. In addition, candidates will learn about specific instructional approaches and resources for supporting students in developing those aspects of literacy in grades 2-4.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1257 - TEACHING ENGLISH LANGUAGE LEARNERS

Minimum Credits: 3
Maximum Credits: 3
This course will explore strategies for teaching English language learns (ell's) in formal and informal education settings. Students will be introduced to foundational theories and current research on the social and academic factors that influence ells learning experiences. The class will include a video component so students can observe instructional approaches for working with linguistically and culturally diverse ells.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1260 - INTRO TO SOCIAL STUDIES EDUC

Minimum Credits: 3
Maximum Credits: 3
A basic introductory course; primary focus is upon secondary schools as institutions in contemporary society and the role of social studies programs and teachers within this context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1268 - SOCIAL STUDIES METHODS PRE-K - 4

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide a theoretical background in social studies education and to exemplify the appropriate principles and practices necessary to deliver effective social studies instruction in pre-k through grade 4.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1270 - INTEGRTG ART & MUSIC ELEM CLSSRM

Minimum Credits: 3
Maximum Credits: 3
To introduce preservice classroom teachers to art and music contents and processes with relevance to their expected role in integrating authentic arts learning experiences in their instruction. Emphasis is placed on developmental aspects of children's' responsive and expressive skills in art and music.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1433 - MATH AND SCIENCE INSTRUCTION FOR YOUNG LEARNERS 1 (PRE-K-GRADE 4)

Minimum Credits: 3
Maximum Credits: 3
The first half of a two-semester course sequence in which pre-service teachers learn about young (pre-k through grade 4) children's thinking related to core ideas in mathematics and science and gradually, through a series of scaffolded tasks, develop pedagogical skills for designing and implementing math and science instruction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1434 - MATH AND SCIENCE METHODS 2 (PRE-K - GRADE 4)

Minimum Credits: 3
Maximum Credits: 3
The second half of a two-semester course sequence in which pre-service teachers learn about young (pre-k through grade 4) children's thinking related to core ideas in mathematics and science and gradually, through a series of scaffolded tasks, develop pedagogical skills for designing and implementing math and science instruction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1452 - DISCIPLINING ENVIRONMENTAL EDUCATION: USING DIGITAL STORYTELLING TO UNPACK ENVIRONMENTAL ISSUES

Minimum Credits: 1
Maximum Credits: 1
In other parts of the world, such as Finland, environmental education is infused throughout the curriculum in history, science, technology, and math. This pop-up course serves as one way to provide a platform for Pitt students to experience Finnish nature schools in their backyard. The goal of the pop-up classes will be to provide a space for developing student projects at both the undergraduate and graduate levels. This course is geared for students interested in authoring visual content and testing the productive tensions of this new media. During the pop-up classes, we will establish a student-led AR/VR authoring club, training sessions for students, and work to amplify and circulate our content across our local and global communities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

IL 1473 - MATH FOR ELEMENTARY TEACHERS

Minimum Credits: 3
Maximum Credits: 3
Students will improve their mathematics knowledge and skills in numeration systems, integers, rationales, geometry, probability/statistics, and other selected topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1498 - DIRECTED STUDY IN MATH & SCI ED

Minimum Credits: 1
Maximum Credits: 9
The student proposes and carries out a study project under the direction and supervision of an appropriate member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

IL 1505 - AUTISM: CHARACTERISTICS AND INTERVENTIONS

Minimum Credits: 3
Maximum Credits: 3
This course will present information on the characteristics of and intervention approaches for children with autism spectrum disorders (ASDS). Introductory material will include diagnosis criteria and characteristics of ASDS. Current research on theories of etiology will be explored and analyzed. Screening tools and assessments specific to this population will be examined in detail. Intervention approaches (e.g. IBI/discrete trial, ABBLs, precision teaching, teacch) will be described and analyzed in terms of basic premises, research base, associated curricula, and evaluative guidelines from the autism society of America and national institute of mental health. Representatives from local education and behavioral health systems serving children with ASDS will present services/intervention models available in the area.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1560 - EARLY EDUCATION OF YOUNG CHILDREN WITH DISABILITIES

Minimum Credits: 3
Maximum Credits: 3
The course focuses on (1) an overview of early childhood special education, including its rationale, historical and legal foundations, efficacy, service

delivery systems, and current trends and practices; (2) the developmental assessment of young children with disabilities in the areas of motor, cognition, social-emotional, language/communication, and adaptive skills; (3) designing preschool classroom environments that meet the needs of children with disabilities through adaptations and accommodations, embedded Learning, and special instruction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1562 - ASSESSMENT: YOUNG CHILDREN WITH DISABILITIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1563 - INCLUSION PRE-K

Minimum Credits: 3
Maximum Credits: 3
This course will cover the rationale, service delivery methods, teaming components, family considerations and curriculum development that are a part of inclusive pre-k settings. In addition, it will cover adaptations, accommodations, and individualized instructional strategies for creating early childhood programs that meet the needs of children without disabilities in inclusive pre-k settings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1580 - FOUNDATIONS OF SPECIAL EDUC

Minimum Credits: 3
Maximum Credits: 3
Course provides an overview of the field of special education. It includes such topics as 1) identification; 2) placement; 3) programming; 4) inclusion; 5) advocacy; and other topics relating to individuals with disabilities, and gifted and talented individuals. The course examines the various philosophical views of exceptionality.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1698 - DIRECTED STUDY-EARLY CHILDHOOD

Minimum Credits: 1
Maximum Credits: 9
This course is a directed study with a faculty member on the topic of Early Childhood.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

IL 1700 - EARLY FIELD EXPERIENCE-ELEM

Minimum Credits: 3
Maximum Credits: 3
Introductory field experience for undergraduate students who plan to enter the teaching profession. Offers opportunities to observe young children and assist master teachers in elementary school classrooms and early childhood education centers.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade

IL 1701 - EARLY FIELD EXPERIENCE-SECONDARY

Minimum Credits: 3
Maximum Credits: 3
This is an introductory field experience class for undergraduate students who plan to enter the teaching profession. The course provides opportunities

for students to observe adolescent learners in middle and high school settings through observations in a classroom, talking with school personnel and meeting in student seminars at Pitt to reflect on what they have seen and heard. Students are provided with guidelines that will assist them in analyzing their observations.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SU3 Elective Basis

IL 1704 - CURRENT ISSUES IN SECONDARY EDUCATION

Minimum Credits: 3
Maximum Credits: 3
What would the ideal high school look like? How would it provide an engaging, equitable and quality education to all adolescents? In Current Issues in Secondary Education: Reimagining the American High School we will explore current issues in U.S. high schools, such as systemic racism and unequal funding, and learn about innovative schools that are doing things differently. We will reflect on our own schooling experiences and collaborate to design a model high school.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 1800 - PRE-STUDENT TEACHING PRE-K

Minimum Credits: 2
Maximum Credits: 2
Full-time practicum for teacher certification candidates. Provides opportunities to observe, plan, conduct, and evaluate instruction in the school setting and receive professional feedback from university supervisors and experienced master teachers.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis

IL 1850 - LIFE SKILLS PRACTICUM

Minimum Credits: 2
Maximum Credits: 2
For this practicum, which is part of the case program, students will be placed in either a primary life skills classroom or a preschool special education program and will be mentored by a classroom teacher, co-teacher, or itinerant teacher depending on the placement. Students will be expected to complete specific requirements in these settings to fulfill state competencies and program requirements.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis

IL 1852 - LIFE SKILLS PRACTICUM SEMINAR

Minimum Credits: 1
Maximum Credits: 1
Seminar for preschool special education/primary life skills practicum. This course is the seminar that accompanies the preschool special education/primary life skills practicum.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

IL 1907 - COLLABORATIVE PARTNERSHIPS WITH FAMILIES AND THE COMMUNITIES

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the role of the professional in supporting families of young children (pre-k - grade 4), including families of children with disabilities and other diverse characteristics. Students will learn about family systems, including how family characteristics affect the development of children, how to communicate, interact, and collaborate with families in school settings, and how to link families with formal and informal community resources.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IL 2511 - CURR PRG DVLP-LOW INCDNC DISABS

Minimum Credits: 3
Maximum Credits: 3
This course addresses program and curriculum development for students with moderate/severe disabilities. Topics include the development of assessment, instruction/curricula for the following areas: personal management, social interaction, language communication, leisure, community, vocational, and functional academics.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade

Irish

IRISH 0101 - IRISH (GAEILGE) 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Medieval & Renaissance Studies, Transatlantic Studies, West European Studies

IRISH 0102 - IRISH (GAEILGE) 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0221 or IRISH 0101; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Medieval & Renaissance Studies, Transatlantic Studies, West European Studies

IRISH 0103 - IRISH (GAEILGE) 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting are cognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0222 or IRISH 0102; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Medieval & Renaissance Studies, Transatlantic Studies, West European Studies

IRISH 0104 - IRISH (GAEILGE) 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0223 or IRISH 0103; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Medieval & Renaissance Studies, Transatlantic Studies, West European Studies

IRISH 0105 - IRISH (GAEILGE) 5

Minimum Credits: 3
Maximum Credits: 3
This course follows level 4, in which students have laid a foundation for further language learning. We now move on to more independent learning, self-discovering, reading articles, and engaging in higher level thinking. Students work on their own and in groups to dissect the mechanics of the language, rationalize texts, and make connections between grammar, natural speech, and idiomatic phrases. Students are expected to come to class enthusiastic and prepared and use this time to learn.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0224 or IRISH 0104; MIN GRADE 'C' FOR ALL LISTED COURSES
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

IRISH 0106 - IRISH (GAEILGE) 6

Minimum Credits: 3
Maximum Credits: 3
This course follows on level 5. Students will continue to break down the mechanics of the language and work towards independent success and higher level thinking. They now move to making evaluations on texts, freely expressing opinions of guided lessons, and independent discovery of grammatical structures. They are equipped for more independent learning, reading articles on culturally relevant topics, both at home and in the community, and engaging in higher level thinking. They work on their own and in groups to dissect the mechanics of the language, rationalize the texts, and make connections between grammar, natural speech, and idiomatic phrases. Students are expected to come to class enthusiastic and prepared and use this time to learn.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: IRISH 0105; MIN GRADE 'C'
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

IRISH 0111 - INTRODUCTION TO IRISH LANGUAGE IN IRELAND

Minimum Credits: 3
Maximum Credits: 3
This study abroad course will provide a basic introduction to Irish language for students with no or very little background in Irish/Gaeilge. It does not take the place of IRISH 0101 - Irish 1 taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IRISH 0112 - CONTINUING IRISH LANGUAGE IN IRELAND

Minimum Credits: 3
Maximum Credits: 3
This study abroad course provides students with some background in Irish/Gaeilge to continue their language study. It does not take the place of a regularly sequenced Irish language course taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IRISH 1615 - IRISH CULTURE AND TRADITIONS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, European and Eurasian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Transatlantic Studies, West European Studies

IRISH 1620 - CULTURAL IMMERSION IN IRELAND

Minimum Credits: 3
Maximum Credits: 3
This three-week immersive course is designed to give students a greater understanding of Ireland and Northern Ireland and the influence of the Irish language in Ireland today. Students will develop a new appreciation for Ireland's culture as we travel through the Emerald Isle, travelling from historic Belfast to cosmopolitan Dublin to the pastoral landscapes of Galway and beyond. This course is designed in two parts; first week you will travel to Belfast with Tony Novosel of the History Department at the University of Pittsburgh and explore the history and culture of Northern Ireland. For the remaining two weeks, you will travel in the company of your Irish-native instructor, throughout the island from the cosmopolitan vibrancy of Dublin to the more pastoral landscape of Galway and the Irish-speaking Gaeltacht beyond. In Ireland's capital, you will experience culture through live music, cuisine and a guided tour of the city. We will explore its history, meet with locals, and gain an understanding of Dublin's place in the world. On our westward journey, we will spend time in the City of the Tribes, Galway. This small pedestrian-friendly city is welcoming and accessible to travelers and has maintained its sense of "Irishness" throughout the Celtic Tiger boom years. Connecting here with the people and the language will enhance your cultural experience and allow you make those personal connections to the Island. Packed with activities and hands-on experience this course will give you a real-life experience, which will be invaluable to your appreciation of Ireland, the Irish language, its culture and people. Highlights will include Irish dance, Book of Kells, tour of government buildings, Gaelic football, conversing and engaging with native speakers and the "craic" of a traditional Irish music session. Ireland is changing and advancing while still maintaining a friendly close personal feel and this two-week course will allow students to see the past and present side by side.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

IRISH 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

IRISH 1905 - UNDERGRADUATE TEACHING ASSISTANT IN IRISH

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

IRISH 1909 - SPECIAL TOPICS IN IRISH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Italian

ITAL 0004 - INTERMEDIATE ITALIAN 2

Minimum Credits: 3
Maximum Credits: 3
This course is a continuation of Italian 0003. Reading skill is emphasized even more than in Italian 0003 but continues to be accompanied by oral-aural and written work.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ITAL 0003 or 0103(MIN GRADE 'C-')
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ITAL 0011 - ELEMN ITALIAN 1: PITT IN ITALY

Minimum Credits: 4
Maximum Credits: 4
An introduction to the Italian language, including basic grammar, vocabulary and speech patterns. Primary goal is to achieve competence in the spoken language, along with basic skills in reading and writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

ITAL 0012 - ELEMENTARY ITALIAN 2: PITT IN ITALY

Minimum Credits: 4
Maximum Credits: 4
An introduction to the Italian language, including basic grammar, vocabulary and speech patterns. Primary goal is to achieve competence in the spoken language, along with basic skills in reading and writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Pitt Class

ITAL 0017 - ITALIES

Minimum Credits: 3
Maximum Credits: 3
This 2nd year course consists of three main parts: Part I introduces students to the geographical contours of the Italian nation throughout history: how has Italy been defined and how is it defined today? In this part we will also identify, compare, and contrast different ways of articulating Italian identity through political, legal, cultural, economic, and linguistic parameters. Part II invites students to engage with the diversity of Italian regions-their languages, cultures, and sub-national identities-through a representative set of regional case studies. Finally, in Part III students will explore the nature of italianità (Italianness) as represented both in the diasporic movement of Italians around the world, and in current debates over immigration to Italy and the rights of immigrants-children-born in Italy-- to enjoy the benefits of Italian citizenship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ITAL 0003 with a grade of C- or better

ITAL 0050 - ITALIAN CONVERSATION

Minimum Credits: 1
Maximum Credits: 1
This course offers students the opportunity to improve their ability to converse in Italian. Discussions will center on topics of general interest.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: West European Studies

ITAL 0055 - ITALIAN CONVERSATION AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
The course focuses on developing the students' listening and speaking proficiency in Italian by providing them opportunities to hear and speak Italian in a variety of contexts, expand their Italian vocabulary, practice different modes of communication (presentational. Interpretive and interpersonal), and learn specific verbal and non-verbal strategies to communicate successfully with others in Italian. Course work centers on a theme particularly relevant to Italian culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: ITAL 0004
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ITAL 0060 - LITERARY ITALIAN 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to Italian literature and culture. The majority of readings are in the prose and poetry of modern Italian writers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: West European Studies, Writing Intensive Course (WRIT)

ITAL 0061 - LITERARY ITALIAN 2

Minimum Credits: 3
Maximum Credits: 3
We will read and discuss in Italian excerpts from Twentieth Century prose and poetry. The course emphasizes advanced language skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ITAL 0004 (MIN GRADE 'B-'); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: West European Studies, Writing Intensive Course (WRIT)

ITAL 0065 - INTENSIVE ADVANCED ITALIAN LANGUAGE FOR STUDY ABROAD

Minimum Credits: 6
Maximum Credits: 6
This 6-credit intensive advanced language course is offered at the Cultural Center for Foreigners of the University of Florence. Its goal is to prepare students to profitably attend the lecture-style lessons in Italian Literature and History conducted (also at the Center and entirely in the target language) by native Italian faculty of that university. The course is design to help the students complete the reading assignments upon which they will be individually tested - at the end of term - in a face-to-face meeting/exam. To this aim extensive and intensive reading skills are practiced in ITAL 1065 throughout the term, so as to enhance students' understanding and control of the language structures, provide them with an increasingly more specialized Italian vocabulary, and improve on their ability to recognize diverse linguistic registers
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

ITAL 0080 - RENAISSANCE ITALY: HUMANISM, POWER & THE ARTS

Minimum Credits: 3
Maximum Credits: 3
An introduction to Renaissance Italy, this class takes an interdisciplinary approach, exploring connections between major Renaissance works and developments across a wide range of fields: from the rise of humanism to the paintings of Botticelli; from Machiavelli's revolutionary handbook of power, The Prince, to his side-splitting comedy, The Mandrake Root; from the restless experimentation of Leonardo da Vinci to the birth of opera. No prerequisites. This class will be conducted in English and does not require knowledge of Italian. It satisfies the Geographical Region and Historical Analysis General Education Requirements, and counts for the Italian minor and major tracks.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ITAL 0081 - MADE IN ITALY:INGENUITY, SINGULARITY, STYLE

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to the central themes of Italian Cultural Studies, tracing them from their origins in early modern period to the

present day. Students explore Italy's unique contributions to the areas of image and style; human mobility; science, technology and design; performance and spectacle; humanism and human rights.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

ITAL 0086 - ITALIAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
The course will present Italian movies from the forties to the present time. The films will provide us not only with the pleasure afforded by outstanding works of art but also with a means of assessing the central intellectual, historical, political, and economic phenomena that have shaped todays Italy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 0087 - FOOD FOR THOUGHT: ITALIAN FOOD CULTURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ITAL 0088 - ITALIAN AMERICA ON SCREEN

Minimum Credits: 3
Maximum Credits: 3
From Valentino to Vinnie Barbarino, from The Godfather to The Sopranos, from Stallone to Snooki, Italian and Italian American cultures have been a mainstay of the American film and television industries since the days of silent film. Through its survey of representations of Italians and Italian Americans, this course seeks to go beyond the stereotypical and scandalous ways in which these images are often produced (and received) to ask questions about the development of American ethnicity; the representation of masculinity and women in the Italian American context; depictions of Italian and Italian American criminality; the potential for culture clash between the Italian American and Italian traditions; and the relationship between stereotype and popular culture. This course is taught in English. No prerequisites. No knowledge of Italian is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

ITAL 0089 - HISTORY OF ITALIAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
Taught in English, this course will introduce students to the history of cinema in Italy from the era of silent films to the present day. We will analyze films from all periods and consider a diversity of forms and genres, including mainstream narrative films, art films, avant-garde experiments, and documentaries. In our century-long journey from the silent blockbuster movies of the 1910s to the Italian super-hero films of the 2010s, we will get to know world-class directors such as Federico Fellini and genre masters such as Dario Argento. We will see what Italian cinema has borrowed from other traditions, and what it has given in return. We will appreciate how Italian b-movies would not exist without American blockbusters, and how a director such as Quentin Tarantino would not exist without Italian b-movies. We will learn about Italy and about how much of its history and of its culture can be seen â?? hidden or deliberately displayed â?? through the frames of Italian films. No previous course experience with cinema is presumed, as we will learn the basics of how to watch, discuss, and write about films and the film industry. Readings will be available in English and all films will have English subtitles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 0090 - EURO CHIC: THE INVENTION OF FASHION

Minimum Credits: 3
Maximum Credits: 3
Since the Renaissance, Italy and France have occupied a fundamental role in the establishment and development of fashion as a creative and commercial enterprise deeply rooted in cultural mores. The course address the historical shifts in the cultural understanding of gender roles, class belonging, consumption habits and expectations, the international circulation of craftmanship and celebrities, and technological innovation. We will start addressing the anthropology of body ornamentation, gender markings and the difference between costume and fashion. Our historical point of departure is the grand arrival of Catherine De Medici from Florence to Paris in 1547, following her marriage to King Henry II of France. We then follow the progressive establishment of Paris as the capital of European (and eventually international) fashion, together with Italian cities like Florence, Venice and Milan. We also take a significant detour through London during the "dandy" era of the early 19th century and the "mod" and "punk" trends of the decades between 1960 and 1980. Punk leads us into a discussion of current international "anti-fashion" trends, such as the politics and economics of privilege, cheap labor and environmental concerns about "fast fashion." This course is taught in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 0100 - ITALIAN FOR THE PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
This course is a content-based introduction to the Italian language for students in professional contexts, including basic grammar, vocabulary, and speech patterns. The primary goals are to achieve competence in the spoken language, along with basic skills in reading and writing, while providing students the opportunity to learn about Italian industry and commerce.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PROG: (College of Business Admin) or (School of Nursing) or (Swanson School of Engineering)

ITAL 0101 - ITALIAN LANGUAGE AND CULTURE 1

Minimum Credits: 4
Maximum Credits: 4
An introduction to the Italian language, including basic grammar, vocabulary and speech patterns. Primary goal is to achieve competence in the spoken language, along with basic skills in reading and writing. Face-to-face lesson meetings (3 days per week) consist of communicative activities in which students practiced learned structures and vocabulary. One hour per week is online. In this hour, students will watch/listen/read lectures, complete exercises related to grammar and vocabulary, and interact with apps and websites (Extempore, Quizlet, etc.) that will be tracked in the classroom management platform Schoology. This instructional approach is designed to allow for maximum interaction in the classroom environment, so that students can receive extensive feedback on their progress. No textbook required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 0102 - ITALIAN LANGUAGE AND CULTURE 2

Minimum Credits: 4
Maximum Credits: 4
An introduction to the Italian language, including basic grammar, vocabulary and speech patterns. Primary goal is to achieve competence in the spoken language, along with basic skills in reading and writing. No textbook required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ITAL 0001 or ITAL 0101 or ITAL 0011; (MIN GRADE 'C-' for all courses listed)
Course Attributes: DSAS Second Language General Ed. Requirement

ITAL 0103 - ITALIAN LANGUAGE AND CULTURE 3

Minimum Credits: 4
Maximum Credits: 4
This course is a logical continuation of the first-year sequence. Emphasis continues to be placed on the oral-aural skills, but the reading and writing skills become increasingly stressed. No textbook required.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ITAL 0002 or ITAL 0102 or ITAL 0012 or ITAL 0200; (MIN GRADE 'C-' for all classes listed)
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Second Language General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ITAL 0110 - MODERN ITALY

Minimum Credits: 3
Maximum Credits: 3
An introduction to Italian literature and culture. The majority of readings are in the prose and poetry of modern Italian writers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 0113 - MODERN AND CONTEMPORARY CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course aims to build on the skills and knowledge students have acquired in ITAL 0003 and continue their development in all aspects of Italian language, with particular emphasis on tools and strategies necessary to advance reading and writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement

ITAL 0115 - PERFORMING ITALIAN

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ITAL 0117 - ITALIES

Minimum Credits: 3
Maximum Credits: 3
This 2nd year course consists of three main parts: Part I introduces students to the geographical contours of the Italian nation throughout history: how has Italy been defined and how is it defined today? In this part we will also identify, compare, and contrast different ways of articulating Italian identity through political, legal, cultural, economic, and linguistic parameters. Part II invites students to engage with the diversity of Italian regions-their languages, cultures, and sub-national identities-through a representative set of regional case studies. Finally, in Part III students will explore the nature of italianità (Italianness) as represented both in the diasporic movement of Italians around the world, and in current debates over immigration to Italy and the rights of immigrants-children-born in Italy-- to enjoy the benefits of Italian citizenship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ITAL 0003 or 0103 with a grade of C- or better
Course Attributes: SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ITAL 0117 - ITALIES

Minimum Credits: 3
Maximum Credits: 3
This 2nd year course consists of three main parts: Part I introduces students to the geographical contours of the Italian nation throughout history: how has Italy been defined and how is it defined today? In this part we will also identify, compare, and contrast different ways of articulating Italian identity through political, legal, cultural, economic, and linguistic parameters. Part II invites students to engage with the diversity of Italian regions-their languages, cultures, and sub-national identities-through a representative set of regional case studies. Finally, in Part III students will explore the nature of italianità (Italianness) as represented both in the diasporic movement of Italians around the world, and in current debates over immigration to Italy and the rights of immigrants-children-born in Italy-- to enjoy the benefits of Italian citizenship.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ITAL 0003 or 0103 with a grade of C- or better
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

ITAL 0119 - ITALIAN CULTURE IN PRACTICE

Minimum Credits: 3
Maximum Credits: 3
The aim of this fifth semester Italian course is to provide students with the means to better understand Italy, its history and culture, while experiencing Italian everyday life first-hand, in one of its major cities and regions. The course is designed to improve, in particular, students, oral proficiency and sociolinguistic competence through immersion; it consists of various sections focused on different, but complementary social and linguistic skills pertaining to getting to know people and places, learning and discussing current Italian events, making cultural comparisons, and argue one's opinions. All the while, students will get acquainted with the city and its territory, their influential past as well as their vibrant present. Emphasis is on acquiring the authentic oral communication skills necessary to navigate expertly Italian-speaking environments, and acquiring cultural knowledge through daily, immersive and exclusive practice of the Italian language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 0200 - ITALIAN FOR THE PROFESSIONS 2

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: ITAL 0100 (Min Grade C'); PROG: College of Business Admin or School of Nursing or Swanson School of Engineering

ITAL 1030 - ADVANCED COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to enable students to improve their understanding and use of all essential elements of written Italian.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TWO of the following courses: ITAL 0110, ITAL 0113, ITAL 0115, ITAL 0117, ITAL 0119
Course Attributes: West European Studies

ITAL 1032 - INTRODUCTION TO ITALIAN LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to Italian linguistics, designed for the student who wants to gain more knowledge about the structures of Italian. It covers the following subfields of linguistics: phonetics, phonology, morphology, syntax, semantics, sociolinguistics and second language acquisition.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TWO of the following courses: ITAL 0110, ITAL 0113, ITAL 0115, ITAL 0117, ITAL 0119
Course Attributes: Writing Intensive Course (WRIT)

ITAL 1041 - ITALIAN THEATRICAL WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
The transition from the study of a foreign language to the study of its literature is often a very difficult one; this course has been designed as a third-year Italian course which will serve as a bridge between these 2 phases of the Italian major curriculum. Working both individually and in group, students will engage in: oral reading, storytelling, role-playing, improvisation, the creation and enactment of their own dialogues & scenarios, close reading, study, interpretation & performance of pre-existing theatrical texts, adaptation to a script & performance of narrative pieces.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TWO of the following courses: ITAL 0110, ITAL 0113, ITAL 0115, ITAL 0117, ITAL 0119
Course Attributes: DSAS Creative Work General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies, Writing Intensive Course (WRIT)

ITAL 1060 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Period and literary topics are to be determined by the instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TWO of the following courses: ITAL 0110, ITAL 0113, ITAL 0115, ITAL 0117, ITAL 0119
Course Attributes: University Honors Course

ITAL 1063 - FROM PAGE TO STAGE: THE TRADITION OF THE ACTOR-AUTHOR IN THE ITALIAN THEATER

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TWO of the following courses: ITAL 0110, ITAL 0113, ITAL 0115, ITAL 0117, ITAL 0119
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ITAL 1065 - SONGS OF THE ITALIAN SELF: ITALIAN LYRIC POETRY

Minimum Credits: 3
Maximum Credits: 3
In this course we will read some of the most famous poems written in Italian, from the time of Dante and Petrarch to the present day.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TWO of the following courses: ITAL 0110, ITAL 0113, ITAL 0115, ITAL 0117, ITAL 0119
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies, Writing Intensive Course (WRIT)

ITAL 1070 - LITERATURE AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the relationship between Italian literature and politics. We will pay particular attention to the ways in which literary works reflect, embrace, or question political problems, movements, or ideologies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TWO of the following courses: ITAL 0110, ITAL 0113, ITAL 0115, ITAL 0117, ITAL 0119
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

ITAL 1071 - THE ETERNAL CITY: ROME FROM ANTIQUITY TO TODAY

Minimum Credits: 3
Maximum Credits: 3
Rome has been called the "Eternal City" because of the enduringly important role it has played in Mediterranean, European, and global affairs over a period of more than two millennia. In this course we will use the rich urban history of Rome as the geographic focal point through which to examine the societal and cultural changes that unfolded across these centuries for Rome's citizens, Rome's imperial subjects, and people connected to Rome by networks of travel and trade. Students will learn about these societal changes through direct analysis of a broad range of authentic texts and media, including letters, short stories, biographies, cinema, travelogues, historical and contemporary maps, architecture and visual arts, graffiti, music, guidebooks, recipes, and exhibition catalogues. Students will create a digital final project: an interactive Story Map (created with the ArcGIS digital

mapping platform) that will represent the routes and experiences of multiple individuals who traveled to and within the city of Rome in different centuries, based on these individuals' written accounts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 1078 - FULBRIGHT SEMINAR IN ITALIAN STUDIES

Minimum Credits: 3
Maximum Credits: 3
The fulbright seminar in Italian studies is the spring-term undergraduate-level course offered by the visiting fulbright distinguished scholar from Italy. This course is typically offered in the fields of art history, cultural studies, film, history, literature, museum studies, political science, or urban studies.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

ITAL 1079 - INTRO TO HOLOCAUST LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course surveys the central texts of the literature of the holocaust, while introducing students to the main issues and preoccupations of holocaust testimony in literature and film.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ITAL 1080 - MASTERPIECES OF ITALIAN PROSE

Minimum Credits: 3
Maximum Credits: 3
In this course we will read some of the best known pieces of Italian short fiction, from Boccaccio's Decameron and Renaissance tales to short stories of contemporary Italian writers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies, Writing Intensive Course (WRIT)

ITAL 1082 - ITALIAN RENAISSANCE LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the literature of Renaissance Italy. Readings include a mixture of poetry and prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies, West European Studies

ITAL 1083 - MODERN ITALIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
The course focuses on a half dozen masterpieces of Italian narrative and poetry. They come from different moments of Italian cultural history--the Romantic, naturalistic, decadent, and nonrealistic periods, stretching from Manzoni in the early 1800's to writers of our time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

ITAL 1084 - INTERCULTURAL PIAZZA

Minimum Credits: 3
Maximum Credits: 3
Italy has long been a nation of emigrants, but only in the last few decades has become a nation receiving large numbers of immigrants. The fall of communism in Eastern Europe, and wars and violence in the Balkans, across Africa and the Middle East, have spurred new migrants towards the West in search of safety and economic prosperity. The unique position of the Italian peninsula in the Mediterranean has made it a key territory of arrival in these modern-day migrations, but to what advantage and to what cost? This course will explore the complexities of cultural identity and migration, and the impact they have on intercultural conflict and cooperation. There will be a particular focus on migration in Italy and on the marginalized communities of contemporary Italy, such as migrants, their Italianborn non-citizen children, and the Roma. We will examine the fluidity of cultural boundaries across time and space, and how ingroup and outgroup dynamics contribute to the manufacturing of fear and prejudice among populations. During their semester abroad, students will reflect on the various elements that define a culture while gaining an increased understanding of how culture shapes individuals and how our cultural identities interact in shared social spaces such as the piazze of Florence. This is a Study Abroad course offered in Florence, Italy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 1085 - DANTE, PETRARCH, AND BOCCACCIO

Minimum Credits: 3
Maximum Credits: 3
Dante, Petrarch and Boccaccio are not only the founding fathers of Italian literature but pivotal figures in Western civilization. This course will present the three writers against the historical and cultural background of pre Renaissance Europe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

ITAL 1087 - FASCISM AND RESISTANCE

Minimum Credits: 3
Maximum Credits: 3
This course follows the development of fascism and anti-fascism in Italy. Main themes covered are WWI; irredentism; colonialism; gender and racial policies; autarchy; WWII; resistance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 1088 - TOPICS ITALIAN AMERICAN STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the new interdisciplinary field of Italian-American studies with a particular focus on how that area of scholarship can shed light on our understanding of the past century of Italian-American culture in Western Pennsylvania and Pittsburgh. The class will consider the portrayal of Italian-Americans in literature and film from the interconnected perspectives of literary-historical interpretation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 1089 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Period and literary topics are determined by the instructor.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

ITAL 1092 - ITALIAN TRANSLATION WORKSHOP: FROM THEORY TO BEST PRACTICES

Minimum Credits: 3
Maximum Credits: 3
This upper-division course constitutes a reconsideration of the student's linguistic, cultural, and literary preparation in the context of translation theory and practice. Students will engage in translation work both from Italian to English and English to Italian though the former will predominate. Students will compile a translation dossier throughout the term, consisting of examples of translation work in a variety of genres and text types, and representing a number of different translation challenges. Students will work towards the goal of producing at least one translation for use by an organization, association, institution, or publication that needs translation to accomplish its mission.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

ITAL 1111 - READING (IN) ITALY

Minimum Credits: 3
Maximum Credits: 3
This course aims to guide students in the close reading, interpretation and discussion of literary and non-literary Italian texts that feature various aspects of the past and present life and cultural history of the place where they have come to study.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 1119 - ITALIAN CULTURE IN PRACTICE 2

Minimum Credits: 3
Maximum Credits: 3
This is an Italian conversation course abroad in Genoa for students at the advanced level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ITAL 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 4
This course enables the student who has completed, or nearly completed, the Italian major to do research under the direction of a faculty member, on a topic of mutual interest.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

ITAL 1903 - HONORS DIRECTED RESEARCH: ITALIAN MAJORS

Minimum Credits: 1
Maximum Credits: 3
This course is offered to Italian majors who have high academic achievement, both in Italian and in general. These students are invited by the Italian faculty to engage in a research project under the direction of a faculty member with whom they have previously studied at the advanced undergraduate level.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: West European Studies

ITAL 1905 - INTERNSHIP IN ITALIAN

Minimum Credits: 1
Maximum Credits: 6
The student is placed in a job setting in which knowledge of Italian language and/or culture is useful.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis
Course Attributes: Undergraduate Internship, West European Studies

ITAL 1907 - ITALIAN UNDERGRADUATE TEACHING ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 3
This applied course in pedagogy is designed to provide advanced Italian majors the opportunity to share their knowledge, experience and passion for the Italian language and culture with underclassmen and students newer to the major. In concert with the faculty member teaching the course in which the Italian major serves as UTA, a number of duties will be discussed, which may include: facilitating discussion groups or other collective fora, organizing tutorials and holding office hours, assisting faculty member in lesson planning, material(s) development and maintaining online sites and/or document repositories for the course. Per the guidelines set by the Dietrich School of Arts and Sciences, Italian UTAs may not substitute teach for the faculty member, nor grade papers, quizzes or exams, nor assign any midterm or final grades, nor perform any work for the faculty member unrelated to the course in question. The faculty member teaching the course in which the Italian major serves as UTA, will articulate expectations clearly from the very beginning, and will meet regularly with said UTA, providing guidance and support throughout the term. Attribution of credits (1 to 3) should be commensurate with the work to be performed and should be communicated to the UTA before the start of the term. Further details of the guidelines can be found on the Dietrich School's site. Prerequisites: To be admitted to this elective, a student must be a declared Italian Language and Literature or Italian Studies major in excellent standing (GPA of 3.5 or higher), and must have previously completed the course - for which the student will serve as UTA - with a grade of "A." In order to serve as a UTA for a course conducted in Italian, the student must have advanced Italian-language proficiency, as demonstrated either by completing a 1000-level Italian-taught course with a grade of A- or higher, or by special permission granted by the faculty mentor.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

ITAL 1909 - UNDERGRADUATE RESEARCH ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

Japanese

JPNSE 0001 - FIRST YEAR JAPANESE 1

Minimum Credits: 5
Maximum Credits: 5
The first step in Japanese language study. The student will acquire a basic competence in speaking, understanding, reading and writing. Emphasis is placed on speaking and understanding as the student learns the sound system, basic vocabulary and essential sentence patterns. Writing will include the katakana and hiragana syllabaries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, West European Studies

JPNSE 0002 - FIRST YEAR JAPANESE 2

Minimum Credits: 5
Maximum Credits: 5
The second term in the systematic presentation of the modern standard language begun in Japanese 0001. Students will continue to develop all four skills--speaking, understanding, reading and writing with continued emphasis on content useful in everyday communications. Writing will include the syllabaries and about 50 selected kanji characters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: JPNSE 0001 (MIN GRADE 'C-')
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

JPNSE 0003 - SECOND YEAR JAPANESE 1

Minimum Credits: 5
Maximum Credits: 5
The third term in the sequence of Japanese language instruction designed to increase the student's proficiency in speaking and understanding of modern standard Japanese through the introduction of more complex grammatical structures and idiomatic expressions. Writing will include about 300 additional kanji characters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 0002 or JPNSE 1061 (MIN GRADE 'C-')
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

JPNSE 0004 - SECOND YEAR JAPANESE 2

Minimum Credits: 5
Maximum Credits: 5
The fourth term in the sequence of Japanese language instruction designed to develop the student's ability to carry on non-technical conversations while continuing to enhance the reading and writing skills. More complex grammatical structures and the study of about 300 additional characters are introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 0003 (MIN GRADE 'C-')
Course Attributes: Asian Studies

JPNSE 0006 - JAPAN: ITS PEOPLE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course is designed for students studying abroad in Japan. It is intended to introduce students to the people and culture of Japan in a meaningful way. Designed as a gateway to more specialized training, this is a course for students who have had little or no previous knowledge of Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 0007 - JAPANESE CULTURE AND CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to fundamental characteristics of the culture and civilization of Japan from earliest times to the present. As a gateway to more specialized training, it is designed for students having little or no previous knowledge of Japan. Students can expect to leave with a basic grasp of important historical periods, an appreciation of key figures and places of cultural significance, and an awareness of important social changes from earliest times to the present day. Students will improve their analytical skills as they read from outstanding examples of Japanese literature; they will synthesize relevant information about Japanese art, architecture, religion, literature, society, and history from lectures and background readings in order to present well-reasoned arguments about Japan; and they will develop a nuanced understanding of Japan's place in a global context. This course aims to a) improve cultural literacy about Japan and the Japanese, b) increase familiarity with principal historical periods, c) introduce basic geography ' location of principal Asian countries, Japanese islands, and Japanese cities, and d) identify important political, social, cultural, artistic, and literary themes for each of the principal periods covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JPNSE 0010 - SPECIAL TOPICS IN EAST ASIAN POP CULTURE

Minimum Credits: 1
Maximum Credits: 1
This mini pop-up course explores the spread of Asian pop across the world in conjunction with the Asian Studies Center's annual lecture series on Asian pop culture. This year's theme is East Asian pop: J-Pop (Japan), K-Pop (Korea) and Canto/Mando Pop (Hong Kong and China). In this course, students will track the lecture series and the issues to discuss include the global legacy of East Asian pop, the role of media and technology, popular music as an instrument of soft power, participatory fandom and international business. The course may also include some experiential learning opportunities such as dance workshop and field trip. At the end of the term, the students will write a reflection paper.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JPNSE 0080 - CITY LIFE AND EAST ASIAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
This is a humanities based modular course designed as an introduction to important areas of East Asian civilization. The student will discover how literature, art and thought has flourished in the urban areas of china and Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JPNSE 0081 - EAST ASIA IN THE WORLD

Minimum Credits: 3
Maximum Credits: 3
To enhance a greater understanding of East Asian cultures; to explore the interactions and relations between the peoples and cultures of East Asia (china and Japan) and the rest of the world, from ancient times to the present. Literary works, memoirs, autobiographies, diaries, historical records and films will be used. Themes involve such topics as the significance of travel in self-understanding, diaspora, immigration, and changing ideas of the homeland.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 0083 - INTRODUCTION TO JAPANESE LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course introduces, through English translations, some of the outstanding works which make up the literary heritage of Japan. The student becomes acquainted with a non-Western literary tradition by exploring similarities and differences in ways of thinking and modes of expression. Readings include selections from ancient poetry, classical Romances, forms of drama, early modern fiction, haiku poetry and modern novels.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

JPNSE 0085 - JAPANESE TALES OF THE SUPERNATURAL

Minimum Credits: 3
Maximum Credits: 3
This course will look at a broad array of fictional works that deal with the supernatural in Japan. The material is arranged historically, ranging from the seventh century to contemporary times, and including ancient myths, theater and narrative fiction, poetry, picture-books, film and anime. The ostensible purpose of the course is to provide a broad view of Japanese literature and culture from a particular angle-the representation of the supernatural. However, by looking at the non-human and the non-natural, students are also encouraged to think about human society and individuality in different historical periods in Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

JPNSE 1011 - BASIC JAPANESE LANGUAGE 1

Minimum Credits: 5
Maximum Credits: 5
The first is a series of courses in modern standard Japanese designed for the student with no previous knowledge of the language. Emphasis is on speaking and understanding and includes useful expressions and practical vocabulary.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

JPNSE 1012 - BASIC JAPANESE LANGUAGE 2

Minimum Credits: 5
Maximum Credits: 5
The second in a series of courses, this is a continuation of Japanese 1011. The course continues to develop the student's ability to speak and understand the language, with emphasis on conversation using everyday vocabulary and expressions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

JPNSE 1013 - BASIC JAPANESE LANGUAGE 3

Minimum Credits: 4
Maximum Credits: 4
The third in a series of courses, this is a continuation of Japanese 1012. The course will further develop the four language skills-speaking, understanding, reading and writing --with continued emphasis on useful vocabulary and expressions in natural conversational situations. Students will learn the Japanese syllabary katakana.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JPNSE 1020 - THIRD YEAR JAPANESE 1

Minimum Credits: 3
Maximum Credits: 3
The first term of the third-year Japanese language course whose primary goal is to develop a broad competency in speaking and reading through materials of academic and cultural interests and the discussion of those materials. The selection of reading materials is made in such a way that most of the characters in the Kyooiku Kanji list is covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 0004 or JPNSE 1062 (MIN GRADE 'C-')
Course Attributes: Asian Studies

JPNSE 1021 - THIRD YEAR JAPANESE 2

Minimum Credits: 3
Maximum Credits: 3
The second term of the third year level Japanese language course and a continuation of Japanese 1020. The student further develops competency through speaking and reading materials of academic and cultural interests and through discussion of those materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 1020 (MIN GRADE 'C-')
Course Attributes: Asian Studies

JPNSE 1023 - ASPECTS OF THE JAPANESE LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to the Japanese language through a study of its structure, vocabulary and cultural heritage. Some topics discussed include word order, basic structural patterns, and particles such as WA and GA, sexism, and word formation. This course is useful for the Japanese studies student wishing to have a deeper understanding of the language as well as the linguistics student interested in gaining knowledge of a non-Indo-European language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 0002
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 1028 - READING JAPANESE 1

Minimum Credits: 3
Maximum Credits: 3
Introduce students to reading in Japanese through in-class and out of class activities and assignments for improving basic reading skills: dictionary skills, fluency with Katakana and Hiragana, character recognition and production of a total of 510 kanji, gaining fuller control of grammar, and increasing vocab. Size. Will also learn to recognize text genres and adopt appropriate reading strategies, deal effectively with unknown characters and vocabulary items, form expectations about the meaning of text, and other heuristic skills. Structure: lecture in English, directed in-class reading in a variety of text genres, reading out loud, listening comprehension work, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JPNSE 1035 - PRAGMATICS OF JAPANESE

Minimum Credits: 3
Maximum Credits: 3
This course will provide an introduction to the usage aspects of Japanese by reading articles on pragmatic aspects of the language. The instructor will lecture on salient points and lead discussion on specific issues and the appropriate use of the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 0002 with a C- or Better
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 1040 - INTRODUCTION TO CLASSICAL JAPANESE 1

Minimum Credits: 3
Maximum Credits: 3
This classical Japanese language course is studied through readings of prose and poetry texts written during and immediately after the Heian period. Literary and linguistic techniques are discussed and points of contrast with the modern language are analyzed. Also introduced are reference materials dealing with classical Japanese language and literature. Students are encouraged, but not required, to complete JPNSE 1023 Aspects of the Japanese Language before enrolling in this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: JPNSE 1021
Course Attributes: Asian Studies

JPNSE 1050 - FOURTH YEAR JAPANESE 1

Minimum Credits: 3
Maximum Credits: 3
A fourth-year Japanese language course for students interested in reading news stories, editorials, journal articles and other special interest items. The goals are to increase vocabulary and to develop the ability to read unfamiliar material as a tool for future research.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 1021 (MIN GRADE 'C-')
Course Attributes: Asian Studies

JPNSE 1056 - JAPANESE LITERATURE AND THE WEST

Minimum Credits: 3
Maximum Credits: 3
A critical study of modern Japanese works and selected modern Western literary materials with special emphasis on intensive analysis by means of modern Western criticism. The course is designed to encourage the student to examine significant similarities and differences between Japanese and non-Japanese materials and to judge the content from an oriental as well as a Western perspective.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

JPNSE 1057 - JAPANESE CULTURE AND SOCIETY THROUGH CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course provides a critical study of selected international prize winning Japanese films and compares these films with Western films dealing with similar themes. The student learns to analyze and interpret films; becomes familiar with particular genres of Japanese films compared with Western; studies the history of Japanese cinema and its place in international cinematography and exposes the inter cultural benefits of judging the content of the films from oriental and Western aesthetic perspectives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, Film Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JPNSE 1058 - WESTERNS AND SAMURAI FILMS

Minimum Credits: 3
Maximum Credits: 3
A focus on the critical comparative study of two filmic genres--the samurai representing Japanese cinema and the Western representing American cinema. The course demonstrates the analytical processes of the film leading to its structural unity; shows the significance of both genres with respect to the history of Japanese, American and European cinema; compares approaches to films of different countries and provides the overall benefits of approaching films from an intercultural standpoint.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

JPNSE 1059 - JAPANESE LITERATURE ON SCREEN

Minimum Credits: 3
Maximum Credits: 3
This course will investigate how literature and film treat some major ideological and socio-cultural issues in Japanese society. Readings of pre-modern tales, modern fiction and contemporary novels. Film adaptations will represent the best of Japan's postwar cinematic tradition. The course is designed for the student interested in Japanese society, culture and intellectual currents through film and literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

JPNSE 1061 - INTENSIVE JAPANESE 1

Minimum Credits: 10
Maximum Credits: 10
The first step in Japanese language study. The student will acquire a basic competence in speaking, understanding, reading and writing. Emphasis is placed on speaking and understanding as the student learns the sound system, basic vocabulary and essential sentence patterns. Writing will include the katakana and hiragana syllabaries.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

JPNSE 1062 - INTENSIVE JAPANESE 2

Minimum Credits: 10
Maximum Credits: 10
Students will continue to develop all four skills begun in Japanese 1061--speaking, understanding, reading and writing with continued emphasis on content useful in everyday communications. Writing will include selected kanji characters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 1061 or JPNSE 0002

JPNSE 1063 - ADVANCED JAPANESE: TECHNICAL 1

Minimum Credits: 3
Maximum Credits: 3
This is the first term of a sequence of Japanese language courses at the third year level designed for students concentrating on scientific, technical or management fields. The course will address the four language skills of reading/ writing and speaking/understanding. Reading will include practice in reading texts from Japanese journals and books in the areas of science, engineering and management. Speaking will include more advanced grammar and vocabulary.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JPNSE 1065 - DETECTIVE AND MYSTERY FICTION IN JAPAN

Minimum Credits: 3
Maximum Credits: 3
This course is a one-semester introduction to Japanese literature in English translation. The course is designed for students interested in broadening their knowledge of Japan, as well as for students who wish to compare other literature they have studied with that ofjapan. No prior knowledge of Japan or Japanese is necessary to enroll.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JPNSE 1066 - INTENSIVE JAPANESE 3

Minimum Credits: 6
Maximum Credits: 6
The ultimate aim of this course is communicative ability in the Japanese language, both written and spoken languages. We consider communicative ability to be the ability to convey messages to native speakers who are unused to communicating with foreigners in ways that create no difficulty, discomfort, or misunderstanding. This course is designed for students with two years of prior Japanese study at the University of Pittsburgh (i.e., First and Second Year Japanese).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JPNSE 1070 - WORLD OF JAPAN

Minimum Credits: 3
Maximum Credits: 3
Students will receive a grounding in basic principles of Japanese classical literature, poetry and aesthetics. They will read the entire text in English of the tale of the Genji and examine important works in Japanese literature composed in later periods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 1071 - THE WORLD OF JAPAN

Minimum Credits: 3
Maximum Credits: 3
This course covers the period between 1570 and 1870. Beginning with the unification of Japan under sixteenth century military war lords and ending with the collapse of the Tokugana Shoganate. Students will read selections from the major scholarly literature on the period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

JPNSE 1080 - GHOSTS, MASKS AND ACTORS

Minimum Credits: 3
Maximum Credits: 3
A critical study of three major dramatic genres of Japan--NOH, Bunraku and kabuki--in cultural origins. Areas to be explored are the use of masks in the world of the NOH theatre, the kabuki with its female impersonators and the near-life-size puppets of the Bunraku. Also discussed is the impact that NOH and Kabuki have had on modern Japanese and non-Japanese theatrical and film genres.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 1081 - FORMS OF JAPANESE THEATRE

Minimum Credits: 3
Maximum Credits: 3
This course will provide a survey of various major forms of Japanese theatre using English language materials. Students will have access to relatively ancient forms of Japanese theatre such as Kagura and no, kabuki drama and the Bunraku puppet theatre through film and videocassette. The modern and avant-garde theatre are also accessible through translation and videocassette material. This course is designed for upper-class majors in theatre arts and non-majors in related fields.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 1700 - INTRODUCTION TO THEORY AND PRACTICE OF TRANSLATION

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course that answers to a growing interest in the theory and practice of translation from Japanese to English. The genres of texts that will be dealt with include literary works of various kinds (novels, poems, children's books), magazine and newspaper articles, web posts, manga, subtitling of anime and other videos, and texts of technical nature. Students will first learn broadly about the discipline of translation studies, including a history of translation and issues in translation (invisibility of the translator, culturally specific translatability issues, etc.). Students will then learn specific types of translation issues that come up when translating Japanese into English, using excerpts from a variety of genres as case studies. Special attention is paid to the structural differences between Japanese and English, cross-cultural differences in stylistics, writing with clarity, reference work, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: JPNSE 0002 or JPNSE 1061 or instructor consent
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JPNSE 1800 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course aims to deepen the student's understanding of the Japanese language and sharpen language skills in areas which have traditionally been difficult to learn and to understand. This will be accomplished through reading relevant literature, examining linguistic data and by in-class discussions.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

JPNSE 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
An individual study under the guidance of a department faculty member. For the student whose topic is not covered by regular course work.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

JPNSE 1906 - JAPANESE INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
This course places the student in a work setting where they can gain practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

JPNSE 1908 - DIRECTED WRITING FOR MAJORS

Minimum Credits: 1
Maximum Credits: 1
In addition to whatever written assignments are required of those enrolled in the course, this directed writing practicum provides students with an opportunity to contribute writing designed in terms of the intellectual strategies of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Asian Studies, Writing Requirement Course

JPNSE 1999 - CAPSTONE PROJECT

Minimum Credits: 3
Maximum Credits: 3
Goal of course is to plan and complete a student-directed academic project (capstone project) that requires the command and synthesis of the knowledge and skills learned in the undergraduate career in order to analyze an intellectual problem or topic in the student's interest. The students will plan, find and use appropriate resources, make and execute plans to bring a capstone project to fruition in consultation with the course instructor and a faculty mentor.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Attributes: Asian Studies, Capstone Course

Jewish Studies

JS 0011 - ELEMENTARY HEBREW 1

Minimum Credits: 4
Maximum Credits: 4
This course introduces students to the fundamentals of the Hebrew language. We study basic vocabulary, grammar and sentence structure, and learn to read and write Hebrew. Emphasis is learning to speak the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0012 - ELEMENTARY HEBREW 2

Minimum Credits: 4
Maximum Credits: 4
Continuation of the introductory work begun in Hebrew 1. Students further develop their reading, writing and speaking skills with the greatest emphasis being placed on oral communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0013 - ELEMENTARY HEBREW 1

Minimum Credits: 5
Maximum Credits: 5
This course introduces students to the fundamentals of the Hebrew language. We study basic vocabulary, grammar and sentence structure, and learn to read and write Hebrew. Emphasis is learning to speak the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0014 - ELEMENTARY HEBREW 2

Minimum Credits: 5
Maximum Credits: 5
Continuation of the introductory work begun in Hebrew 1. Students further develop their reading, writing and speaking skills with the greatest emphasis being placed on oral communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement

JS 0025 - INTERMEDIATE HEBREW 3

Minimum Credits: 3
Maximum Credits: 3
Students continue to develop the skills acquired in Hebrew 2 with emphasis on speaking and on understanding the spoken language. Readings this term include short stories and articles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0026 - INTERMEDIATE HEBREW 4

Minimum Credits: 3
Maximum Credits: 3
Students continue to develop their Hebrew reading and speaking skills. Sophisticated Hebrew texts are introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0037 - ADVANCED HEBREW 5

Minimum Credits: 3
Maximum Credits: 3
This course is for advanced level students and uses Hebrew language literature, print and electronic media, film, and TV shows. Emphasis is placed on conversation, modern Hebrew literature, and composition.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0040 - INTRODUCTION YIDDISH LANGUAGE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

JS 0090 - MYTHOLOGY IN THE ANCIENT NEAR EAST

Minimum Credits: 3
Maximum Credits: 3
The myths of the ancient near East are among the earliest written interpretations of the world and human existence. They are also among the most enduring, although they have only been unearthed in the last 200 years. In this course, we read myths from ancient Mesopotamia, Ugarit, and Israel. We study the myths as literary works, representative of the ideas and issues of the original cultural context in which they were shaped. These myths offer insight into the religious mentality of the ancient near east, as well as societal and political issues. We examine themes such as the presentation of the life of the gods, the relationship between the human and divine worlds, the issues of mortality and immortality, existence, fertility, kingship, and ethics. The primary goal of this course is to better understand these myths as they existed and developed in their ancient settings. Of course, because the myths are expressions of human thought, we may find that in studying them we also come to better understand ourselves.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JS 0115 - BIBLE AS LITERATURE

Minimum Credits: 3
Maximum Credits: 3
While the Bible can be read in many ways with many different goals, the focus of this course is: reading and examining the Bible as a literary text ¿ or, more accurately, as a collection of widely diverse literary texts. Therefore, the questions we ask of the biblical texts will pertain primarily to their forms, interests, and historical contexts. Most of this course will focus on narrative portions of the Bible, although we will see how other literary forms are often interwoven throughout the Bible's stories. Among the topics and issues we will consider in this course are: the origins of biblical texts and their historical contexts; the Bible's own representations of history, particularly the history of Israel; the nature of God throughout the Bible; human-divine relations and covenants; different critical approaches to the text (e.g., source criticism, redaction criticism); the figure of Jesus; uses of the Hebrew Bible in the New Testament; apocalyptic literature; and the various themes, motifs, and literary forms that bring these issues together. Throughout the semester we will also look at different uses of the Bible as a way of illuminating the Bible as a work of literature. Such uses will include different translations or paraphrases of the Bible, various representations of biblical narratives, and examples of the Bible in contemporary popular culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0205 - INTRODUCTION TO JUDAISM

Minimum Credits: 3
Maximum Credits: 3
Major themes of the Jewish tradition from biblical to modern times are explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 0283 - US AND THE HOLOCAUST

Minimum Credits: 3
Maximum Credits: 3
With increasing interest in the Holocaust in Europe, this course focuses on the American side of the Atlantic - on issues of anti-Semitism and anti-immigrant sentiment in this country and on America's response to the Holocaust. We will also look at some post-holocaust issues as well.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

JS 0625 - DETECTIVE FICTION

Minimum Credits: 3
Maximum Credits: 3
This course examines detective fiction in terms of its history, its social meaning and as a form of philosophizing. It also seeks to reveal the place and values of popular fiction in our lives.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

JS 1048 - THE HOLOCAUST IN CONTEXT

Minimum Credits: 3
Maximum Credits: 3
"Ethnic cleansing" and "genocide" are neither twentieth-century phenomena, nor is their occurrence linked to any particular region in the world. However, during the two world wars and their aftermath acts the civilian population of Central and Eastern Europe experienced a degree of mass violence that not only changed to face of the region but also led to the establishment of the very term "genocide". The Holocaust stands out as the most comprehensive, most radically executed case of genocide in modern times. Yet it was embedded in a wider context of systematic violence against various populations in Central and Eastern Europe. Rather than beginning with a general, abstract reflection on the reasons for the various forms of mass violence from ethnic cleansing to genocide, this course allows students to explore the specific social, cultural, and political conditions under which the sometimes entangled cases of mass violence against civilians occurred in twentieth-century Central and Eastern Europe. The course concludes with a general reflection and discussion of the concept of "genocide", the limits of its analytical usefulness, and the political baggage it carries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 1065 - BIBLICAL HEBREW

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the grammar, syntax and vocabulary of Biblical Hebrew.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 1100 - ISRAEL IN THE BIBLICAL AGE

Minimum Credits: 3
Maximum Credits: 3
This course explores the history and development of the people of Israel in ancient times. What do we know about the Israelites and how do we know it? Using biblical texts and archaeological remains, students will learn about everyday life in ancient Israel, the role of class and gender, life-cycle events, religious festivals, political institutions, systems of belief, and famous personages in history and lore. The trajectory of the course will begin with the Near Eastern origins of the people, continue through the rise of the Israelite and Judahite monarchies, and end with the Second Temple commonwealth of Judea in the Persian and Hellenistic periods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JS 1102 - THE HISTORY OF GOD

Minimum Credits: 3
Maximum Credits: 3
God has a history. In the earliest days of that history, God was worshiped as one of a plethora of deities controlling various spheres of cosmic activity or the human world. Students in this course will learn about this ancient pantheon - how gods functioned in society and how their presence was experienced by those devoted to them. They will then trace the evolution of the God of Israel from a mountaintop deity of the southern Levant in the late second millennium BCE to a supreme deity worshiped by a small group of absolute monotheists based in Jerusalem in the mid-first millennium BCE. Students will become more sophisticated readers of biblical texts in the process. The sources of the Hebrew Bible reflect not a homogeneous monotheism, but rather a diverse set of belief systems tending toward henotheism or even polytheism. By appropriating and reinterpreting the religious myths of their neighbors, the Israelites arrived at a character of the divine that has proven problematic to many contemporary theologians,

particularly on issues of LGBT rights, women's rights, and the environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1108 - COMPARATIVE EUROPEAN HISTORY

Minimum Credits: 3
Maximum Credits: 3
This non-honors course compares two European states in the Twentieth Century. The focus is on social history.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

JS 1111 - SPECIAL TOPICS MINI COURSE

Minimum Credits: 1
Maximum Credits: 1
This one-credit course changes topics every term. Please see the Topic Title.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

JS 1160 - JERUSALEM: HISTORY AND IMAGINATION

Minimum Credits: 3
Maximum Credits: 3
This course examines the political, religious, and cultural history of Jerusalem, focusing primarily on Jerusalem as a concrete and conceptual phenomenon in the premodern period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1170 - ARCHAEOLOGY OF ISRAEL-PALESTINE

Minimum Credits: 3
Maximum Credits: 3
Is archaeology in a place like Israel-Palestine an objective science? In this course, we explore how past and present are linked as nation-states and religious communities utilize the archaeological record to mold identities and to forward certain narratives. Our focus will be on the major archaeological sites of Israel-Palestine, particularly in Jerusalem and its environs. We will explore the political and religious issues that have emerged from or surround their excavation. Archaeology in the Holy Land has long been driven by a desire to shed light on-or even authenticate-the Bible, while the "exotic Orient" was explored in the 19th and early 20th centuries through western expeditions and excavations that served to further colonial interests. These religious and political motivations persist even if their manifestations have shifted with time. Through site tours, museum visits, student-led discussions, talks with local experts, and even a day participating in an archaeological excavation, students will gain direct experience with the places that have aroused controversy because of their problematic relationship to biblical and other ancient texts and/or because of their location in politically contested space.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JS 1210 - JEWS AND JUDAISM IN THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
This course covers the development of Classical Judaism from the Second Temple Period, beginning with the end of the Babylonian Exile in the 6th century BCE, and continues up through the emergence of Rabbinic Judaism, culminating with the redaction of the Babylonian Talmud in the 6th century CE. We cover both the major historical trends as well as the major religious developments. The course also introduces students to the major Jewish texts of both the Second Temple Period and the Rabbinic Period, emphasizing close readings of primary texts.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1220 - JEWS AND JUDAISM IN THE MEDIEVAL WORLD

Minimum Credits: 3
Maximum Credits: 3
An introduction to the facets of medieval and early modern Jewish life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

JS 1227 - MEDIEVAL SPAIN

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1232 - MODERN EASTERN EUROPEAN JEWRY

Minimum Credits: 3
Maximum Credits: 3
This upper level undergraduate course surveys the history of the historically most numerous portion of European Jewry from the medieval period to the present, emphasizing the modernization of east-central European Jews as minorities in the context of their host societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1240 - JEWS AND THE CITY

Minimum Credits: 3
Maximum Credits: 3
Comedian Lenny Bruce riffed in 1963 that "If you live in New York or any other big city, you are Jewish. It doesn't matter even if you're Catholic; if you live in New York you're Jewish." In this course, we will discover why Lenny Bruce -- and so many other observers of Jewish life -- came to understand urbanity as a core component of the Jewish experience. We will begin our study of the Jewish encounter with urban life in the 19th century, as millions of Eastern European Jews migrated from the small villages of their birth to cities across the globe. This course will trace this Eastern European Jewish diaspora to urban destinations around the world, before training its lens on the Jewish encounter with American cities. We will pay close attention to how patterns of Jewish urbanization changed regionally and over time; how urbanization affected Jews' home-life, leisure time, religious practices and occupational choices; how differences in gender and class affected Jews' experiences in urban spaces; and how Jews interacted with other ethnic groups in diverse, urban environments. Delving into the history, built environment, and archival sources pertaining to the Jewish experience in Pittsburgh will provide us with a dynamic case study for this crucial relationship between Jews and the city.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1241 - GENDER AND JEWISH HISTORY

Minimum Credits: 3
Maximum Credits: 3
This course will highlight the impact of gender in modern Jewish history, revealing the divergent experiences of Jewish women and Jewish men as they adapted to the modern world. We will take an international approach to this history, tracing the ways in which circumstances in Europe,

America, and the Middle East shaped how Jews understood and responded to gender roles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1250 - JEWS AND JUDAISM IN THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
Here we examine the specific challenges that the modern period posed to existing Jewish life and the nature of the responses made by Judaism to those challenges.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

JS 1252 - HOLOCAUST HISTORY AND MEMORY

Minimum Credits: 3
Maximum Credits: 3
The holocaust - that is, the genocide of six million Jews in Nazi-occupied Europe during World War II - was a critical event of the early twentieth-century that continues to resonate today. Our historical survey will look at the holocaust primarily through the experiences of its Jewish victims, though we will discuss some of the other groups, such as the roma, disabled people, and gay men, who were also targeted and systematically murdered by the Nazis. Additionally, we will think about the perpetrators of the holocaust and the ideologies that led to the genocide, such as racism, nationalism, and antisemitism. Finally, we will move beyond the history of the holocaust to think about the ways that this event has been remembered and reconstructed by survivors, nations, institutions, museums, the arts, popular culture and the media. Looking at how institutions here in Pittsburgh commemorate the holocaust will offer us local, concrete examples of how people continue to grapple with this history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

JS 1253 - INTRODUCTION TO HOLOCAUST LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course surveys the central texts of the literature of the holocaust, while introducing students to the main issues and preoccupations of holocaust testimony in literature and film.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Humanistic GE. Req.

JS 1254 - HOLOCAUST LITERATURE AND FILM

Minimum Credits: 3
Maximum Credits: 3
This course relies on primary cultural sources of the third Reich, especially film, but also literary, visual, architectural, musical, etc. To examine the parameters of Nazi culture. It will examine such diverse aspects as the leader principle, gender roles, racial hygiene, anti-Semitism, mass culture, propaganda, and visions of history. The cultural artifacts will be analyzed both in terms of their aesthetics as well as the social and historical context of their production.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Russian & East European Studies

JS 1256 - MODERN ISRAEL AND PALESTINE

Minimum Credits: 3
Maximum Credits: 3
We trace the history of modern Israel from the idea of the return in the second half of the 19th century through the state of Israel today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1258 - ISRAELI AND PALESTINIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Reading literature from places of conflict provides an opportunity to go beyond headlines and gain insight into the day-to-day existence, desires, imaginings, and perspectives of the people who live there. Reading literature also reveals how religious values and practices become a part of everyday culture and how those values are embraced or challenged. This course will introduce students to the literature produced by Israeli and Palestinian authors, with a focus on how contemporary issues in Israeli and Palestinian society are depicted by writers from each culture. Topics will include: how these writers construct place; the role of religious texts in literature; conflicts and community within each society; how literature helped shape an Israeli national consciousness and a Palestinian national consciousness; how Israeli and Palestinian writers imagine the other; and the role of the Shoah in Israeli literature and the Nakba in Palestinian literature. The course will equally focus on developing students' academic and reflective writing skills. Students will produce a combination of literary analysis and self-reflective writing that uses techniques of creative nonfiction. Together, these writing assignments will help students respond to both the course texts and the cultural experience of studying in Israel-Palestine.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

JS 1259 - ISRAELI FILM AND TELEVISION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement

JS 1260 - AMERICAN JEWISH EXPERIENCE

Minimum Credits: 3
Maximum Credits: 3
We analyze the Jewish experience in America since the middle of the 18th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

JS 1270 - GERMANY TODAY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JS 1272 - VIENNA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 1280 - MODERN AND CONTEMPORARY JEWISH THOUGHT

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the varieties of Jewish thought, which developed out the of the 19th and 20th centuries and to the present day. After exploring the historical context of the philosophical legacy of Jewish thought, we will consider how Jewish intellectuals sought to reimagine their Jewish faith and Jewish identity in response to various concerns in the 19th and 20th centuries. Specifically, we will analyze Jewish responses to modernity and secularism, Jewish engagement with Western culture and Christianity, political theory (e.g, Marxism) and matters of social justice, Jewish feminism, and the prospect of ethics and religious faith after the Holocaust.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 1295 - JEWS AND THE AMERICAN CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to: the prominent roles 0f Jews in the American cinema (as producers, directors and performers); the manner in which issues of Jewish identity (including the negative aspect of ethnic stereotypes) and topics such as anti-Semitism and the holocaust have been treated in the American cinema; and the way in which film genre intersects with issues of Jews in American film (e.g. Comedy and so-called "Jewish humor", the appeal to Melo drama in the social problem film, etc.).
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

JS 1383 - POLITICS OF CONTEMPORY MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3
The main emphasis of the course will be on conflict and conflict resolution in the middle east. Conflict has been a constant feature of the region since 1945. This course will be primarily concerned with how and why these conflicts are generated, escalate, become protracted, and are resolved.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JS 1475 - RELIGIOUS DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
What is the best way to accommodate religious and cultural diversity within a nation-state and in civil society? How should individual rights to practice religion be balanced with communal needs? Should freedom from religion be protected as much or more than freedom of religion? These are pressing contemporary issues in many countries, including the United States, but issues of religious diversity and questions of whether and how to tolerate religious minorities have a long history. In this course, we will examine the toleration of minority religions in particular historical settings, and the issues and problems (both doctrinal and social/political) that societies grappled with as they confronted diverse religious landscapes. We will also use these historical precedents as a lens to examine contemporary examples of religious pluralism, diversity, and conflict. Case studies will mainly be drawn from pre-modern Europe and modern Europe and North America, but we will also look at Mughal and modern India and discuss religion in pre-modern China.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

JS 1644 - CHRISTIAN MUSLIMS JEWS IN THE MIDDLE AGES: CONNECTION & CONFLICT

Minimum Credits: 3
Maximum Credits: 3
Was the world of Europe and the Middle East before the Enlightenment a period of unending religious conflict and intolerance? Were Jews the

victims of severe persecution and violence everywhere during this period? Did Christians and Muslims engage in unceasing religious wars? The answer to all three of these questions is no. While the Middle Ages were a period of conflict and competition between the three major western religious groups, they were also a time of coexistence and cooperation. This class shifts from extreme dichotomies and simplistic stereotypes to deeply examine the period in all of its complexity: what were the theological, political, and legal contexts in which Christians, Muslims, and Jews interacted in both Christian Europe and the Muslim world? How did these deeply religious societies organize themselves to tolerate the religious "Other"? When and why did toleration break down and lead to expulsion, forced conversion, or violence? What kinds of cross-cultural exchanges and cooperation take place in economic, cultural, intellectual, and social life? We will also look at new ideas of toleration (and intolerance) that emerged at the end of the Middle Ages and examine aspects of inter-religious encounters and dialogues today. We will discuss not only the significance of Jewish-Christian-Muslim interactions in the Middle Ages but also assess these encounters as a case study in the broader history of religious diversity, pluralism, and conflict.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

JS 1645 - THE HISTORICAL JESUS

Minimum Credits: 3
Maximum Credits: 3
This course examines the complex and often polarized relationship between Jesus and Jews (and by extension, Christianity and Judaism) in both ancient and modern contexts. Students will interact with a wide range of primary sources centered on the figure of Jesus `from the Christian gospels through rabbinic discussions of Jesus to modern portrayals of Jesus and the Jews in cinema and scholarship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1649 - ANTISEMITISM THEN AND NOW

Minimum Credits: 1
Maximum Credits: 1
A one credit mini-course featuring a series of lectures from faculty experts in different fields on hatred and hostility toward Jews in particular historical and geographical contexts, past and present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

JS 1650 - APPROACHES TO ANTISEMITISM

Minimum Credits: 3
Maximum Credits: 3
We survey historical, sociological, psychological, religious and political approaches to expressions of antisemitism as we study scholarly treatment of the phenomenon in the 20th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

JS 1680 - HISTORY AND MEMORY IN THE JEWISH TRADITION

Minimum Credits: 3
Maximum Credits: 3
Students will be introduced to the manner in which historians have studied and understood the Jewish experience from antiquity through the modern age. The role of historical study in the formation of Jewish identity will be especially highlighted.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1681 - INVENTING ISRAEL: ZIONISM, ANTI-ZIONISM, AND POST-ZIONISM

Minimum Credits: 3
Maximum Credits: 3
In this course, we will study the origins and development of Zionism as a form of modern Jewish nationalism, the emergence of different Zionist ideological streams, and non-Zionist, ant-Zionist, and post-Zionist views of Jews and non-Jews. We will also explore Zionism as a case study of relations of religion and nationalism in modernity. This course is an opportunity to carefully study and to contextualize writings and ideas of religious and political thinkers that have been both influential and controversial. The goal is to offer students historical background to ideas and issues of contemporary importance as well as skills in interpretation and contextualization of complex texts that continue to inform public discourse.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

JS 1762 - THE GUIDE TO THE PERPLEXED

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

JS 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Internships for credit with community organizations can be arranged.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

JS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 4
Jewish Studies Certificate students write their capstone thesis under this section and should register for 3 credits. Permission of the Jewish Studies coordinator is required.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

JS 1902 - DIRECTED STUDY-UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 4
Students may undertake a variety of individual reading or research projects under the close supervision of a faculty member. Regular meetings are required. Permission of the Jewish Studies coordinator and the faculty member required.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

JS 1903 - DIRECTED RESEARCH-UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 4
Students may undertake a variety of individual research projects under the close supervision of a faculty member. Regular meetings are required. Permission of the Jewish Studies coordinator and the faculty member is required.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

JS 1904 - UNDERGRADUATE RESEARCH ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 4
Students serve as an undergraduate teaching assistant under the supervision of a faculty member. 1-4 credits available depending on number of hours per week worked. Credits earned will be s/n only. Permission of the Jewish Studies coordinator and the faculty member is required.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

JS 1905 - UNDERGRADUATE TEACHING ASSISTANT

Minimum Credits: 1
Maximum Credits: 4
Students serve as an undergraduate teaching assistant in Hebrew 1 or 2 under the supervision of the language instructor. 1-4 credits available depending on number of hours per week worked. Credits earned will be s/n only. Permission of the Religious Studies DUS and the language instructor is required.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

Korean

KOREAN 0001 - FIRST YEAR KOREAN 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

KOREAN 0002 - FIRST YEAR KOREAN 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0001 or 1001 (MIN GRADE 'C-')
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

KOREAN 0003 - SECOND YEAR KOREAN 1

Minimum Credits: 4
Maximum Credits: 4
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0002 or 1002; MIN GRADE: 'C-' FOR LISTED COURSES
Course Attributes: Asian Studies

KOREAN 0004 - SECOND YEAR KOREAN 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0003 or 1003; MIN GRADE: 'C-' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement

KOREAN 0005 - THIRD YEAR KOREAN 1

Minimum Credits: 4
Maximum Credits: 4
Students will build on previously learned material and learn increasingly complex grammar patterns and build more sophisticated vocabulary for everyday interactions in all learning skill areas: speaking, listening, reading, and writing. Will read texts that focus on Korean society and history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0004 or 1004; MIN GRADE: 'C-' FOR LISTED COURSES
Course Attributes: Asian Studies

KOREAN 0006 - THIRD YEAR KOREAN 2

Minimum Credits: 4
Maximum Credits: 4
Students will build on previously learned material and learn increasingly complex grammar patterns and build more sophisticated vocabulary suitable for everyday interactions, and apply them in all language skill areas (speaking, listening, reading, and writing). By reading texts that focus on Korean society and history, students will learn some representative aspects of Korean culture. Approximately two hours per week to develop aural/oral skills using a communicative method.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0005 or KOREAN 1005; MIN GRADE: 'C-' FOR LISTED COURSES
Course Attributes: Asian Studies

KOREAN 0007 - INTRODUCTION TO KOREAN CULTURE AND CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

KOREAN 0010 - SPECIAL TOPICS IN EAST ASIAN POP CULTURE

Minimum Credits: 1
Maximum Credits: 1
This mini pop-up course explores the spread of Asian pop across the world in conjunction with the Asian Studies Center's annual lecture series on Asian pop culture. This year's theme is East Asian pop: J-Pop (Japan), K-Pop (Korea) and Canto/Mando Pop (Hong Kong and China). In this course, students will track the lecture series and the issues to discuss include the global legacy of East Asian pop, the role of media and technology, popular music as an instrument of soft power, participatory fandom and international business. The course may also include some experiential learning opportunities such as dance workshop and field trip. At the end of the term, the students will write a reflection paper.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

KOREAN 0023 - KOREAN LANGUAGE: THEN AND NOW

Minimum Credits: 3
Maximum Credits: 3
The primary goal of this course is to offer a basic level linguistic and historical knowledge of the Korean language to students with no background or knowledge in Korean. Also, the course introduces the language within a broader context of culture and history of Asian languages. The course covers 1) the origin and history, 2) relationship with other Asian languages: Chinese, Japanese, and Dravidian in particular, 3) creation and development of the alphabet Han.kul, 4) sounds and their diachronic and synchronic changes, 5) basic structures and socio-cultural aspects, and 6) political and geographical dialects of the Korean language. At the end of the semester, students are expected to gain an introductory linguistic and historical knowledge of the Korean language for their further studies in the Korean language and linguistics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

KOREAN 0070 - WORLD OF KOREA: PAST AND PRESENT

Minimum Credits: 3
Maximum Credits: 3
Intro to Korean society/culture through study of acclaimed film "Chunhy-ang, based on famous 18thc Korean literature work, providing complex window to late Korean traditional culture, literature and performing arts. Students will ac quire tools to understand diversity in aspects of many cultures, as well as a changing political system. Topics include: family structure and marriage, gender issues, class system, agricultural life of Korean society, education, relations to other neighboring cultures and various forms of art expression.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

KOREAN 0075 - INTRODUCTION TO KOREA THROUGH FILMS

Minimum Credits: 3
Maximum Credits: 3
Introduces Korean cinema to students in broader (and at times narrow) cultural, social, and aesthetic contexts to investigate transnational media production and circulation, globalization, consumer culture, commercialization, and construction of national, ethnic and gender identities. Through this course, students will learn more about specific issues pertaining to Korea and its people, as well as gain familiarity with some prominent film directors of Korea's. They will develop a critical and historical consciousness of Korean visual culture, assessing the worth and content of the films.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

KOREAN 0084 - INTRODUCTION TO MODERN KOREAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Students examine major Korean writers from the early 20th century to the present through identifying key thematic and formal issues in modern Korean literature and to situate them within a larger historical and cultural context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

KOREAN 1001 - FIRST YEAR KOREAN 1

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

KOREAN 1002 - FIRST YEAR KOREAN 2

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0001 or 1001
Course Attributes: Asian Studies

KOREAN 1003 - SECOND YEAR KOREAN 1

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0002 or 1002; MIN GRADE: 'C-' FOR LISTED COURSES
Course Attributes: Asian Studies

KOREAN 1004 - SECOND YEAR KOREAN 2

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0003 or 1003; MIN GRADE: 'C-' FOR LISTED COURSES
Course Attributes: Asian Studies

KOREAN 1005 - THIRD YEAR KOREAN 1

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0004 or 1004; MIN GRADE: 'C-' FOR LISTED COURSES

KOREAN 1006 - THIRD YEAR KOREAN2

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0005 or 1005; MIN GRADE: 'C-' FOR LISTED COURSES
Course Attributes: Asian Studies

KOREAN 1023 - ASPECTS OF THE KOREAN LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
This course will examine and explore essential topics in Korean linguistics such as the Korean scripts and sounds, genetic affiliation, historical development, word structure, grammatical structure, discourse, honorific and speech styles, and first/second language acquisition. Upon completion of this course, students will i) understand how the Korean language developed, and what kind of relationship the Korean language has with other languages, ii) have an ability to critically analyze basic word, phrasal and sentence structures as well as discourse structures, iii) have a general understanding of how the Korean language works as a communication system.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

KOREAN 1050 - FOURTH YEAR KOREAN

Minimum Credits: 3
Maximum Credits: 3
Designed to advance students to greater strengths in reading and writing skills and socio-cultural knowledge of Korean beyond high intermediate level. Students will develop skills in reading and listening to various authentic materials, and enhance speaking and writing skills to discuss issues of contemporary Korean society and culture. The goals of the course also include furthering aural comprehension of contemporary television documentaries, news and drama with decreased reliance on pedagogical aids. This course is student centered and students will develop their knowledge of Korean lexicon (including Chinese characters of Sino-Korean) and grammar through their own readings/writings and class discussions. Students will write short research papers throughout the semester. Class will be conducted in Korean exclusively, and uses a combination of lectures and discussions. Both lectures and discussions are based on assigned readings and discussion topics that will be distributed through bi-weekly schedules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 0006 or 1006 (MIN GRADE 'C-')

KOREAN 1051 - FOURTH YEAR KOREAN 2

Minimum Credits: 3
Maximum Credits: 3
Goals: advance students to greater strengths in reading and writing skills and socio-cultural knowledge of Korean beyond high intermediate level; develop skills in reading and listening to authentic materials; enhance speaking and writing skills to discuss issues of contemporary Korean society and culture; furthering aural comprehension of contemporary television documentaries, news and drama with decreased reliance on pedagogical aids. Course is student centered class and students will develop their knowledge of Korean lexicon (including Chinese characters of Sino-Korean) and grammar. Class will be conducted in Korean exclusively.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: KOREAN 1050 (MIN GRADE 'C-')

KOREAN 1060 - LANGUAGE AND SOCIETY IN KOREA

Minimum Credits: 3
Maximum Credits: 3
Focus on fundamental knowledge of sociolinguistics, language variations, varieties and codes of inherent sociality cultural implements. With substantial differences between eastern and Western cultures, students will study linguistic behavior and social groups, social class, effects of gender, address and reference terms, politeness strategies and style of language form used both in English and Korean in comparative study. Materials arranged to explain and evaluate the interaction of language, society and culture, the process of how people use language to construct social meaning and how those processes influence linguistic structure as well as cross-cultural communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

KOREAN 1080 - CONTEMPORARY KOREAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course aims to help the students achieve in-depth understanding of major cultural developments in Korean society in the past two decades or so. To that end, this course is arranged around some questions intimately tied to recent changes in Korean society such as (re)construction and consumption of tradition, collective traumas and unfinished mourning, political activism in the postauthoritarian era, post-division imagination, the hallyu-new media nexus, sports-sexuality-nationalism, Korean cuisine, homogeneity to multiculturalism, queer Korea, Korean diaspora, and North Korea in transition. This course will examine these issues from various angles by engaging with a wide range of fields and diverse forms of texts such as literature, theater, music, cinema, TV show, new media, food, and sports. Thereby, this course seeks to help the students gain more competence in comparative and interdisciplinary analysis of our culture. Upon successful completion of this course, students will be able to: ¿ Show

solid knowledge of major issues in contemporary Korean culture. ¿ Demonstrate increased awareness of the diversity of human societies and cultures. ¿ Exhibit the skills of close reading, critical analysis, and interdisciplinary approach. ¿ Demonstrate the ability to identify engaging research topics, find secondary sources for those questions, and produce well-grounded and original arguments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

KOREAN 1800 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

KOREAN 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Student will undertake a specific research topic regarding language, literature, or culture of Korea. Faculty will approve an independent study agreement and student will make a midterm and final report to instructor.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Attributes: Asian Studies

KOREAN 1906 - KOREAN INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
This course places the student in a work setting where they can gain practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

Latin

LATIN 0011 - BEGINNING LATIN 1

Minimum Credits: 5
Maximum Credits: 5
This course is the first half of a two-term sequence introducing students to the morphology and syntax of classical Latin. Its purpose is to move students as quickly as possible to the reading of simple Latin prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies

LATIN 0021 - BEGINNING LATIN 2

Minimum Credits: 5
Maximum Credits: 5
This course is the second half of a two-term sequence introducing students to the morphology and syntax of classical Latin. Its purpose is to move students as quickly as possible to the reading of simple Latin prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0011
Course Attributes: DSAS Second Language General Ed. Requirement, Medieval & Renaissance Studies

LATIN 0101 - BEGINNING LATIN 1

Minimum Credits: 4
Maximum Credits: 4
An introduction to the sounds, vocabulary and basic grammatical structures of the Latin language. Students will begin to develop a competence in reading the language through textbook drills as well as Latin stories illustrating the Roman way of life. Please note that this course will be a hybrid of three 50-minute scheduled in-class meetings and a fourth 50-minute session to be completed by students working independently, either online at home, or though taking exams at the University Testing Center. Classroom time will generally center around instructor introduction of new material and some rudimentary work with said new material. In the online session, students will then complete more advanced exercises related to introduced material; take quizzes/exams; or complete group assignments. All online work will take place on Pitt supported applications (notably CourseWeb), or free platforms (e.g., Quizlet; TopHat; Centaur Education Software) or websites.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LATIN 0102 - BEGINNING LATIN 2

Minimum Credits: 4
Maximum Credits: 4
An introduction to the sounds, vocabulary and basic grammatical structures of the Latin language. Students will begin to develop a competence in reading the language through textbook drills as well as Latin stories illustrating the Roman way of life. Please note that this course will be a hybrid of three 50-minute scheduled in-class meetings and a fourth 50-minute session to be completed by students working independently, either online at home, or though taking exams at the University Testing Center. Classroom time will generally center around instructor introduction of new material and some rudimentary work with said new material. In the online session, students will then complete more advanced exercises related to introduced material; take quizzes/exams; or complete group assignments. All online work will take place on Pitt supported applications (notably CourseWeb), or free platforms (e.g., Quizlet; TopHat; Centaur Education Software) or websites.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0101 or equivalent with a minimum grade of C-
Course Attributes: DSAS Second Language General Ed. Requirement

LATIN 0210 - INTERMEDIATE LATIN: PROSE

Minimum Credits: 3
Maximum Credits: 3
In this course students consolidate their grasp of Latin grammar and develop their skills of comprehension through close reading of selected prose texts, most usually drawn from Caesar and Cicero.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0021 or 0102

LATIN 0220 - INTERMEDIATE LATIN: VERSE

Minimum Credits: 3
Maximum Credits: 3
In this course students are introduced to Latin verse through close reading of selected portions of Virgil's Aeneid.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0210
Course Attributes: Medieval & Renaissance Studies, West European Studies

LATIN 1011 - BEGINNING LATIN 1

Minimum Credits: 5
Maximum Credits: 5
This course is the first half of a two-term sequence introducing students to the morphology and syntax of classical Latin. Its purpose is to move students as quickly as possible to the reading of simple Latin prose.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies

LATIN 1021 - BEGINNING LATIN 2

Minimum Credits: 5
Maximum Credits: 5
This course is the second half of a two-term sequence introducing students to the morphology and syntax of classical Latin. Its purpose is to move students as quickly as possible to the reading of simple Latin prose.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Medieval & Renaissance Studies

LATIN 1032 - MEDIEVAL LATIN AUTHORS 2

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by medieval Latin authors. The specific authors and works vary from term to term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0210 or 0220

LATIN 1033 - MEDIEVAL LATIN AUTHORS 2: WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This is the writing practicum for the course medieval Latin authors 2.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: LATIN 0210 or 0220, and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Intensive Course (WRIT)

LATIN 1300 - LATIN AUTHORS 1

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Roman authors. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0210 and 0220
Course Attributes: Medieval & Renaissance Studies, West European Studies

LATIN 1301 - LATIN AUTHORS 1: WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking Latin 1300 as a writing course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0210 and 0220; and PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Medieval & Renaissance Studies, West European Studies, Writing Requirement Course

LATIN 1302 - LATIN AUTHORS 2

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Roman authors. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0210 and 0220
Course Attributes: Medieval & Renaissance Studies, West European Studies

LATIN 1303 - LATIN AUTHORS 2: WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking Latin 1302 as a writing course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LATIN 0210 and 0220, and PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Medieval & Renaissance Studies, West European Studies, Writing Requirement Course

LATIN 1400 - ADVANCED READINGS IN LATIN EPIC

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Roman epic poets. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: LATIN 0220 or Equivalent (consult department)

LATIN 1402 - ADV READINGS IN LATIN DRAMA

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Roman dramatists. The specific authors and works read vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: LATIN 0220

LATIN 1406 - ADVANCED READINGS IN LATIN LYRIC

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Roman lyric poets. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: LATIN 0220

LATIN 1416 - ADVANCED READINGS IN LATIN HISTORIANS

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Roman historians. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: LATIN 1300 or 1302

LATIN 1420 - ADVANCED READINGS IN LATIN PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected works by Roman philosophers. The specific authors and works vary from term to term; the course may be repeated for credit when the material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: LATIN 0220

LATIN 1430 - SPECIAL TOPICS IN LATIN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
In this course students read selected Greek texts. The course may be repeated for credit provided the specific material covered is different.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: LATIN 0220

LATIN 1800 - HONORS COURSE/MAJORS

Minimum Credits: 3
Maximum Credits: 3
In this course undergraduate majors in classics who wish to graduate with honors (and are otherwise qualified) write an honors paper, usually in conjunction with a Latin reading course at the 1300 or 1400 level.
Academic Career: Undergraduate
Course Component: Thesis Research
Grade Component: Satisfactory/No Credit
Course Attributes: Medieval & Renaissance Studies

LATIN 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
In this course a student undertakes independent study in Latin in consultation with a member of the faculty.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

LATIN 1902 - DIRECTED STUDY FOR UNDERGRADS

Minimum Credits: 1
Maximum Credits: 6
In this course a student undertakes directed study in Latin under the close guidance of a member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

LATIN 1903 - DIRECTED RESEARCH FOR UNDERGRADS

Minimum Credits: 1
Maximum Credits: 9
In this course a student undertakes directed research in the field of classical civilization under the close guidance of a member of the faculty.
Academic Career: Undergraduate
Course Component: Directed Studies

Grade Component: Letter Grade
Course Attributes: Capstone Course

LATIN 1904 - UNDERGRADUATE RESEARCH ASSISTANT

Minimum Credits: 1
Maximum Credits: 3
This course enables advanced majors to receive academic credit for serving as assistants to faculty members who are conducting research projects (e.g., compiling bibliography for a new class, preparing a work for publication, creating a conference presentation). This collaborative project will result in a meaningful experience that will provide the student with a foundation in the mechanics of research and publication. Given the variable aspects of this learning experience, there is not official syllabus. However, students and faculty who participate in this course are required to submit a signed contract prior to the start of the semester in which the assistantship will occur. This contract is subject to the approval of the undergraduate committee.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Satisfactory/No Credit

LATIN 1990 - UNDERGRADUATE TEACHING ASSISTSHIP IN LATIN

Minimum Credits: 1
Maximum Credits: 5
This course allows students to earn credits for serving as undergraduate teaching assistants in courses listed under the 'Latin' subject code. Admission requires permission of the department chair. Students may repeat for credit.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

Leadership

LDRSHP 1100 - THEORIES OF LEADERSHIP

Minimum Credits: 3
Maximum Credits: 3
This course is designed to acquaint students with multiple theories and practices associated with effective leadership. In answering the question, "what is leadership," it examines such theories as situational, participative, transformational, and servant leadership. It also addresses those leadership and administrative skills and practices usually associated with effective community organization and professional management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LDRSHP 1200 - LEADERSHIP SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course is designed to develop in students an understanding of the conceptual and practical strategies of leadership. Through the use of readings, in-class activities and guest presenters, students are exposed to four factors that play a role in the development or modification of a leader. These include: appreciation of the concept of organizational life; understanding the process of change; comprehending the impact of leadership style, delivery, and strategy; and finally, developing an awareness of individual strengths and weaknesses and how to most effectively match individual style to the leadership process. The course is required of all students pursuing the Undergraduate certificate in leadership. Students should have successfully completed both the emerging leaders program and the theories of leadership course prior to registering.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LDRSHP 1100 or PUBSRV 1390

Legal Studies

LEGLST 0020 - PUBLIC LAW AND MORAL REASONING

Minimum Credits: 3
Maximum Credits: 3
The course is designed to provide the intellectual tools to analyze moral and legal dilemmas which face professionals in their respective fields of work, and the society in which all of us must live. The course will help students to develop the skill of moral reasoning so that they may better identify, analyze, deliberate, and resolve moral dilemmas.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 0080 - INTRODUCTION TO LEGAL STUDIES

Minimum Credits: 3
Maximum Credits: 3
Provides students with an overview of the structure and operation of American law and legal systems. Offers examples of the type of topics treated in depth in substantive legal studies courses. Introduces the student to the nature, functions, limitations, and operations of law as an institution in modern society. Various jurisprudential approaches are examined, and selected problems of law, power, morality and social and economic stratification are studied. Heavy emphasis is placed on the institution. Various empirical studies of the law in action will be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1140 - INTRODUCTION TO CRIMINAL LAW

Minimum Credits: 3
Maximum Credits: 3
Acquaints the student with basic principles of criminal law derived from our English common law heritage and from more recent statutory penal code revisions in the American states. Course examines the meaning of crime and of criminal responsibility; criminal complicity and conspiracy; sentencing alternatives; and the decriminalization of some offenses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1141 - INTRODUCTION TO CRIMINAL PROCEDURE

Minimum Credits: 3
Maximum Credits: 3
This course examines the procedural effects of criminal law, including constitutional rights, state criminal procedure, and appellate decisions and rules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1150 - LAWYERS AND LEGAL PROFESSION

Minimum Credits: 3
Maximum Credits: 3
This course offers a multi-disciplinary examination of lawyers and their role in society, with an emphasis on the relationship of lawyers to courts, judges, clients, and other lawyers. Topics to be covered in the course include: the philosophy of advocacy, the psychological and ethical aspects of practicing law, the role of law schools in the creation of professional identity, societal attitudes towards lawyers and the legal system, the involvement of lawyers in government, politics, and policy making, and evolving concepts of legal practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1152 - LEGAL ISSUES IN PUBLIC SERVICE

Minimum Credits: 3
Maximum Credits: 3
This course examines the impact of law on public administration and manner in which legal implications condition formulation, adoption, and the implementation of programs.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Attributes: Urban Studies

LEGLST 1155 - LAW AND SOCIAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
This course investigates the interrelationships between change in society and change in legal rules. Legal change is studied as an outcome of social change; directed social change as a result of legal change, or social engineering, is also examined; and the mutual ongoing interactions between legal and social change are investigated. Classical and contemporary theories related to these areas are introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1210 - LAW AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course examines the relationships between law and values, law and power, law and discretion. The nature of legal reasoning is illustrated and analyzed as it is applied to statutory law, case law, and constitutional law.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

LEGLST 1230 - PSYCHOLOGY AND LAW

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to the contributions of psychiatry and psychology to the legal process. The role of the psychology expert in criminal proceedings, the problem of criminal insanity, the process of civil commitment, and the rights of those deemed to be mentally ill, are among topics to be examined. Students will be asked to read and analyze legal cases and scholarly discussions of these and other related issues. Actual observance of relevant courtroom proceedings will be arranged.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1260 - LAW, LITERATURE, AND CINEMA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the student to literary treatments of basic issues of law and justice. Through an examination of plays, novels, essays, and short stories, the student will be able to see competing conceptions of law, justice, and morality. Legal themes as they appear in literature can then be used to analyze and evaluate selected areas of civil and criminal law.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1315 - SEX, LAW AND MARRIAGE

Minimum Credits: 3
Maximum Credits: 3
Surveys the socio-legal aspects of marriage, marital alternatives, and related modes of sexual expression. Laws in these areas have been changing dramatically, reflecting, if not causing, fundamental shifts in the values and norms surrounding intimate behavior. The following topics are covered: ceremonialized marriage, commonlaw marriage, "open" marriage, "contract" marriage, homosexual and transsexual "marriage", unwed cohabitation, annulment, separation, divorce, artificial insemination, test tube fertilization, abortion, illegitimacy, alimony and property settlements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1318 - SEPARATION, DIVORCE AND CUSTODY

Minimum Credits: 3
Maximum Credits: 3
A structural analysis of the causes and consequences of divorce. The process of divorce in its various psychological, legal, economic and social components is examined. The impact of divorce on the spouses, children and relatives is discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1320 - LAW AND ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to the role of law in regulating environmental pollution. Included will be an examination of water pollution, air pollution and noise pollution. Major federal statutes such as the national environmental protection act, and the Clean Air Act will be studied along with judicial and administrative cases and rules governing these areas. Emphasis will be upon the interaction of law, politics, economics and psychology in environment control.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Urban Studies

LEGLST 1325 - CONSUMER LAW

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the laws governing their rights as consumers. The evolution of consumer rights is traced from the common law to our present statutes. Students are introduced to state and federal laws, among them: truth in lending act, fair debt collection practices act, fair credit reporting act, equal credit opportunity act, unfair trade practices and consumer protection law and auto mobile lemon law.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1327 - INTERNATIONAL LAW

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the nature of international law and how it differs from law within states. Topics covered include the following: treaties, enforcement mechanisms, international courts, human rights issues, the law of war, and international law of the environment, and prospects for the future of international law.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

LEGLST 1340 - INTRODUCTION TO CIVIL RIGHTS

Minimum Credits: 3
Maximum Credits: 3
The individual rights protected by the bill of rights form the basis for this course. Specifically, the right to privacy, sexual equality, educational equality, religious freedom, and issues surrounding freedom of the press will be studied. In addition, the civil rights of specific groups including students, blacks, Indians, poor people, mental patients, members of the armed forces, teachers and public officials will be analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1355 - EMERGING ISSUES IN LEGAL AND SOCIAL POLICY

Minimum Credits: 3
Maximum Credits: 3
This course explores several issues with which the law is now wrestling. Topics explored include assisted reproductive technologies, assisted suicide and right to die movements, intellectual property in the internet age, immigration law, environmental and climate change, same-sex marriage, aids law, freedom of expression and advanced communication technologies, international law and universal jurisdiction, and the future of American law. With all of these topics, we will explore how the law struggles to keep pace with advances in science and technology, as well as how the law reacts to

a changing society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

LEGLST 1410 - INTRODUCTION TO LEGAL RESEARCH

Minimum Credits: 3
Maximum Credits: 3
Deals with the development of law library research skills and some basic research skills in the social sciences. It provides the students with an understanding of the law library and will assist in developing research skills through the use of primary and secondary sources of the law. The student will become familiar with the use of the University of Pittsburgh libraries and the paralegal law library collection.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LEGLST 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
Course is supervised placement with specific agency or firm in some part of the legal system.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

LEGLST 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Allows advanced students to pursue topics and research of special interest which are not otherwise available. Course requires construction of plan of study of research on topics selected and approval of instructor who will supervise work.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

Less Commonly Taught Languages

LCTL 0101 - FOREIGN LANGUAGE 1

Minimum Credits: 4
Maximum Credits: 4
This course will help students learn to understand, and to express themselves creatively in both spoken and written **Language**. They will acquire basic knowledge of everyday **Language** and of the country and culture of **Country**. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in **Language** grammar, writing, listening and reading comprehension skills. Students will be expected to memorize vocabulary and utilize it in both speech and writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LCTL 0102 - FOREIGN LANGUAGE 2

Minimum Credits: 4
Maximum Credits: 4
This course will help students learn to understand, and to express themselves creatively in both spoken and written **Language**. They will acquire basic knowledge of everyday **Language** and of the country and culture of **Country**. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in **Language** grammar, writing, listening and reading comprehension skills. Students will be expected to memorize vocabulary and utilize it in both speech and writing.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LCTL 0101; MIN GRADE 'C'

LCTL 0103 - FOREIGN LANGUAGE 3

Minimum Credits: 3
Maximum Credits: 3
This course will help students learn to understand, and to express themselves creatively in both spoken and written **Language**. They will acquire basic knowledge of everyday **Language** and of the country and culture of **Country**. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in **Language** grammar, writing, listening and reading comprehension skills. Students will be expected to memorize vocabulary and utilize it in both speech and writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LCTL 0102; MIN GRADE: 'C'

LCTL 0104 - FOREIGN LANGUAGE 4

Minimum Credits: 3
Maximum Credits: 3
This course will help students learn to understand, and to express themselves creatively in both spoken and written **Language**. They will acquire basic knowledge of everyday **Language** and of the country and culture of **Country**. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in **Language** grammar, writing, listening and reading comprehension skills. Students will be expected to memorize vocabulary and utilize it in both speech and writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LCTL 0103; MIN GRADE: 'C'

LCTL 0111 - INTRODUCTION TO FOREIGN LANGUAGE ABROAD

Minimum Credits: 3
Maximum Credits: 3
This course offers an introduction to the target language together with hands-on experiential learning activities such as role-plays, quizzes, out-of-classroom activities and target language partners. Students that have no previous knowledge of the target language will learn basic vocabulary, grammar and pronunciation in order to be able to do grocery shopping, order food, ride on public transportation, conduct small talk with the local population, etc. The course also focuses on teaching students culture-specific vocabulary and concepts in order to improve understanding of the target culture. This course is an introductory course only and will not replace level 1 foreign language taught at Pitt.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

LCTL 0112 - CONTINUING FOREIGN LANGUAGE ABROAD

Minimum Credits: 3
Maximum Credits: 3
The content of this course will vary based on students' prior experience with the language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

LCTL 0161 - AMHARIC 1

Minimum Credits: 4
Maximum Credits: 4
This course will help you learn to understand, and to express yourself creatively in both spoken and written Amharic. You will acquire basic knowledge of everyday Amharic and of the country and culture of Ethiopia. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in Amharic grammar, writing, listening and reading comprehension skills. You will be expected to memorize vocabulary and utilize it in both speech and writing. In this course, you will learn the following thematic / cultural and grammatical topics: Thematic and Cultural Topics; Social interaction; Introducing oneself; Family members and housing; Activities and personal information; Foods; Time; Traveling; Holidays & Ceremonies; Daily routine; Nature Grammar Topics: Amharic alphabet & pronunciation; Pronouns & Indirect subjects; Verbs, Plural marker; Description & comparison; Subordinate Clauses; Preposition; Expressions

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LCTL 0231 - DANISH 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

LCTL 0232 - DANISH 2

Minimum Credits: 4
Maximum Credits: 4
This course will help you learn to understand, and to express yourself creatively in both spoken and written Danish. You will acquire basic knowledge of everyday Danish and of the country and culture of Denmark. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in Danish grammar, writing, listening and reading comprehension skills. You will be expected to memorize vocabulary and utilize it in both speech and writing
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LCTL 0351 - HAITIAN CREOLE 1

Minimum Credits: 4
Maximum Credits: 4
This course will help you learn to understand, and to express yourself creatively in both spoken and written Haitian Creole. You will acquire basic knowledge of everyday Haitian Creole and of the country and culture of Haiti. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in Haitian Creole grammar, writing, listening and reading comprehension skills. You will be expected to memorize vocabulary and utilize it in both speech and writing. In this course, you will Talk about yourself (origin, age, appearance), your studies, activities and preferences; Ask others about their life, studies, activities and preferences; Describe where you live and with whom you live (home, family); Discuss present, future, and past events, and tell time; Read short passages on topics such as Haitians and Haitian culture
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LCTL 1901 - LANGUAGE INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

LCTL 1905 - UNDERGRADUATE LANGUAGE TEACHING ASSISTANT

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

LCTL 1909 - TOPICS IN LANGUAGE STUDY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Linguistics

LING 0007 - ESL WRITING INTERMEDIATE

Minimum Credits: 3
Maximum Credits: 3
This is an intermediate writing skills course for non-native speakers of English, covering (a) the process and mechanics of writing a research paper (b) composition writing, with a focus on expository writing for college work (c) selected grammar skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

LING 0008 - ESL SPEAKING AND LISTENING

Minimum Credits: 3
Maximum Credits: 3
This is an advanced conversation course for non-native speakers of English to improve speaking and listening skills while gaining experience in the organization and oral presentation of material for academic work. Pronunciation exercises are done in class, while fluency and comprehensibility are the objectives of the student led discussions and presentations. The student will also learn how to prepare and present speeches and discussions. Note-taking skills are practiced. Some language lab work is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

LING 0009 - ESL WRITING ADVANCED

Minimum Credits: 3
Maximum Credits: 3
This course is intended for foreign students who need work on advanced composition skills in English covering (a) the process and mechanics of writing a research paper (b) composition writing, with a focus on expository writing for college work (c) selected grammar skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

LING 0010 - ESL READING AND VOCABULARY

Minimum Credits: 3
Maximum Credits: 3
This is an advanced reading skills course for non-native speakers of English, emphasizing the type of reading required in University-level course work. The course includes intensive reading of passages from the course text, extensive reading of academic or other material selected by the student or instructor, speed improvement and vocabulary development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

LING 0232 - DANISH 2

Minimum Credits: 4
Maximum Credits: 4
This course will help you learn to understand, and to express yourself creatively in both spoken and written Danish. You will acquire basic knowledge of everyday Danish and of the country and culture of Denmark. We will focus on building communicative competence and conversational proficiency, while simultaneously building a solid foundation in Danish grammar, writing, listening and reading comprehension skills. You will be expected to memorize vocabulary and utilize it in both speech and writing.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LING 1000 - INTRODUCTION TO LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
This course is a survey of general linguistics, emphasizing the theory and methodology of the traditional central areas of the field--phonetics, phonology, morphology, and syntax- with special concentration on phonological and syntactic theories and analytical techniques. The remainder of the course will be devoted to phonetics, morphology, historical linguistics, semantics and pragmatics, sociolinguistics, and psycholinguistics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

LING 1023 - ASPECTS OF THE KOREAN LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
This course will examine and explore essential topics in Korean linguistics such as the Korean scripts and sounds, genetic affiliation, historical development, word structure, grammatical structure, discourse, honorific and speech styles, and first/second language acquisition. Upon completion of this course, students will i) understand how the Korean language developed, and what kind of relationship the Korean language has with other languages, ii) have an ability to critically analyze basic word, phrasal and sentence structures as well as discourse structures, iii) have a general understanding of how the Korean language works as a communication system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

LING 1025 - ASPECTS OF THE CHINESE LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

LING 1027 - TOPICS ON CHINESE AS A SECOND LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

LING 1050 - COMPUTATIONAL METHODS IN THE HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

LING 1060 - LANGUAGE AND SOCIETY IN KOREA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

LING 1095 - LANGUAGE IN SCIENCE FICTION

Minimum Credits: 3
Maximum Credits: 3
If representatives from an alien species appeared on earth from outer space, how would we communicate with them? What if they were not organic creatures, but were instead machines? What would an alien species sound like? What kinds of changes will happen to languages over the next several centuries? Science fiction tropes like aliens, robots, and time travel richly reward linguistic investigation. In this class, we will apply current linguistic theory to various works of science fiction, asking first and foremost: "How linguistically plausible are the scenarios, tropes, and narratives depicted here?"
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LING 1235 - LANGUAGE, GENDER AND SEXUALITY

Minimum Credits: 3
Maximum Credits: 3
The course considers the ways in which linguistic patterns are sensitive to the social categories of gender and sexuality, including intersectional categories such as race, class, and age, and the role of power and privilege in these patterns. The main questions considered are: How does language categorize the gender/sexuality world in both grammar and interaction? How do speakers display, create, and orient to gender, sexuality, and desire in interaction? How and why do people display different ways of speaking based on their gender/sexual identities?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Intensive Course (WRIT)

LING 1240 - LANGUAGE AND THE LAW

Minimum Credits: 3
Maximum Credits: 3
This course explores some of the ways in which linguistic science can shed light on the use and misuse of language in the legal system. After an introduction to the origins and special characteristics of written English legal language ("legalese"), we will study the layman's (non-) understanding of technical legal language; the language of persuasion (e.g. Exploitation of such linguistic features of ambiguity, implicit "rules of conversation" and socially stigmatized dialect features); and arguments for and against the participation of linguists as expert witnesses in the courtroom.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LING 1250 - HISTORY OF LANGUAGE IN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

LING 1253 - LANGUAGE AND THE BLACK EXPERIENCE

Minimum Credits: 3
Maximum Credits: 3
English colonial expansion and pursuit of trade during the seventeenth to nineteenth centuries gave rise to a wide array of language varieties, among them the pidgin and creole varieties that arose in the plantation colonies of the Atlantic, Pacific and the Americas. In this course, we examine the languages of enslaved Africans as they are reanalyzed/reformed in these new contexts. We will confront and challenge 'common sense'

beliefs/ideologies about language, race, education, and power. In particular, we will: examine of the structure, history and use of Afro-American language varieties; take a close look at the history and symbolic role of language in the lives of Blacks; examine how people's sociocultural experience is reflected in language; examine the relationships between language and social life in the African-American and Caribbean communities; and consider implications of language differences for social and educational opportunities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

LING 1263 - CROSS-CULTURAL COMMUNICATION

Minimum Credits: 3
Maximum Credits: 3
This course is designed for those planning to work or live in a situation which serves as an interface between two or more cultural groups, and also for those who are interested in matters of language and culture. The curriculum deals with aspects of culture as they interact with language, and specific topics (e.g. Dialects; language in situations of cultural contact; and the implications of cross cultural communication differences for education policy).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

LING 1267 - ASPECTS OF SOCIOLINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
Aims at providing insights into how social relationships influence language, and how language can play a role in shaping social relationships, both in the individual and societal level. Some of the issues we will look at are; attitudes towards languages, dialects and society; social differentiations of language; black English; multilingualism; bilingual education and language planning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

LING 1269 - LINGUISTIC VARIATION AND CHANGE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LING 1330 - INTRODUCTION TO COMPUTATIONAL LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
This is a course designed to introduce students in linguistics to the foundations and real-world applications of computational linguistics. Students will learn how core aspects of human language¿words, morphology, grammar, and meaning¿are represented and processed computationally. They will also be introduced to the challenges of real-world language engineering problems and discover how the latest language technologies and artificial intelligence systems seek to solve them. Many practical applications will be covered: search, document classification, spell checking, machine translation, corpus exploration, and more. Throughout the course, there will be a big emphasis on hands-on training; students will work extensively with popular natural language processing platforms. NOTE: The Python prerequisite (CS 8, 10-12) can be waived upon proof of Python knowledge. Please email the instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 and CS (0008 or 0010 or 0011 or 0012) with grade of B or better

LING 1340 - DATA SCIENCE FOR LINGUISTS

Minimum Credits: 3
Maximum Credits: 3
Data science is a fast-growing professional and academic discipline that is highly interdisciplinary in nature. Its practice centers on domain expertise: this course will introduce linguistics majors to core methods and practices in data science as it pertains to linguistic inquiry. Students will first learn the fundamentals of structuring, manipulating and sharing various forms of linguistic data; be given hands-on training on practical aspects of data processing, including handling large quantities of text data ('big data') and creating statistical language models through machine learning; and get acquainted with the emerging field of knowledge engineering and ontology. Additionally, they will be given a chance to apply data-intensive methods to a term project of their choice. Upon successful completion of this course, students will be able to: identify the best methods for representing and analyzing linguistic data for a given purpose; transform and process linguistic data in large volumes; and understand how statistics-driven text analytics and machine learning methods operate.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 and (LING 1330 or CS 0008 or 0155)

LING 1441 - FIELD METHODS IN LINGUISTICS

Minimum Credits: 3
Maximum Credits: 4
This course is meant to simulate the experience of linguistic field work, and raise awareness about the effectiveness of specific interview techniques for acquiring linguistic data. The course will give instruction and experience in eliciting data from a speaker of non (indo) European language. Students will undertake the investigation of the phonology, some aspect of grammar, and the ethno semantic study of a taxonomically structured semantic field such as plants or animals. Students will make detailed elicitation plans in advance of their administration.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: LING 1578 and 1773 and 1777; LVL: Sr

LING 1447 - LANGUAGE, CULTURE AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Certain cultural concerns are well-labeled linguistically: kinship, plant-names, diseases, colors, etc. The study of how such semantic fields are labeled and organized is ethnosemantics. Much of the way language is used depends on the context of speaking. Different ways of talking to different people is the subject matter of sociolinguistics. Some thoughts that we habitually think seem illogical on reflection, but it seems as if our language predisposes us to think this way. Such phenomena are addressed by the sapir-whorf hypothesis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

LING 1470 - ENDANGERED LANGUAGES

Minimum Credits: 3
Maximum Credits: 3
In this course, we investigate such questions as: What are the symptoms and underlying causes of language endangerment and language death? Are efforts to revitalize dying languages worthwhile, or is the disappearance of languages inevitable or even beneficial? How are thought, identity, and culture influenced by language, and vice versa -- and what implications does the answer to that question have for language documentation and revitalization?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LING 1520 - INTRODUCTION TO ARABIC LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
In the first half of this course, students will learn about the linguistic structure of modern standard Arabic and related dialects with a special focus on the phonology, morphology and syntax. Material in the second half of the course will focus primarily on social issues related to the Arabic language including discourse, dialectology and language variation, diglossia and language contact.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

LING 1578 - PHONETICS AND PHONEMICS

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to the production, recognition, and transcription of speech sounds in various languages of the world, and to the patterning of these sounds in phonological systems. Emphasis is on articulatory phonetics, though there is also some discussion of acoustic and experimental phonetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020; MIN GRAD 'B'

LING 1579 - PHONOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course introduces the principles of phonological analysis and theory. After a brief survey of the roots of modern phonology in Prague school and American descriptivist ('classical phonemic') theories, the main focus of the course will be on generative phonology. Both in and out of class, students will be expected to solve phonological problems and construct theoretical arguments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1578 or CSD 1026

LING 1580 - LANGUAGE AND THE MIND

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the study of language as a cognitive science, focusing on the mental representations of the sounds of speech. Throughout the course we will emphasize the scientific methods used by researchers to investigate questions about the sounds of language. Because this course is multidisciplinary in nature, drawing primarily from the fields of linguistics and psychology, students will be introduced to the different methods, techniques, and technologies used by researchers in both fields.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or PSY 0010 or CSD 1020

LING 1650 - ACQUISITION OF VARIATION

Minimum Credits: 3
Maximum Credits: 3
Upon completion of this course, students will: understand how variationist theory accounts for second language acquisition (SLA); develop a knowledge of variationist theory in order to be able to evaluate critically empirical research; be able to write a successful academic abstract; present empirical articles and original projects with clarity and to create an academic handout; apply the theoretical and methodological concepts covered in class to an original final project, which includes the creation of an elicitation task; and, develop professionally.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 and (LING 1578 or 1579 or 1773 or 1777 or 1873 or 1877 or 1878 or 1879)

LING 1682 - INTRODUCTION TO SEMANTIC THEORY

Minimum Credits: 3
Maximum Credits: 3
A survey course designed to introduce students who have been exposed to linguistics and logic to contemporary work in the theory of meaning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

LING 1720 - STRUCTURE OF SIGN LANGUAGES

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the linguistic structure of sign languages, drawing examples principally, though not exclusively, from American sign language (ASL). It will also highlight similarities and differences between sign languages and spoken languages. In addition to structural features, the course will cover mechanisms unique to visual/spatial languages, the use of the face and body for grammatical signals, language variation, and acquisition of sign languages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

LING 1721 - SOCIOLINGUISTICS OF SIGN LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
There are various sociolinguistic topics that one must consider with respect to signed languages of the deaf. Regarding language contact, ambient languages-either signed or spoken-influence a signed language. Less than 10% of deaf people are exposed to signed language from birth, which results in unique phenomena. Additionally, signed languages exhibit variation based on a myriad of social and geographical factors. These topics, in addition to language planning and language policy, will be addressed in this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

LING 1738 - LINGUISTIC STRUCTURES OF ENGLISH

Minimum Credits: 3
Maximum Credits: 3
This course is a survey of phonological, morphological, and syntactic structures of English, with an emphasis on its typologically unusual characteristics. The course will cover how English words, phrases, and sentences are put together, as well as current and historical trends that have led to English as it is used today. We will also address differences between prescriptive rules of how English "should be", and descriptive generalizations about how English actually is. Lecture format with class discussion.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000

LING 1773 - MORPHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Morphology, the study of words, is interrelated with the syntax, the phonology, the lexicon, and semantics. The purpose of this course is to develop operational competence, through problem solving and discussion, in the major aspects of morphological theory. Theoretical issues to be addressed will include lexical phonology, prosodic morphology, morphology and logical form, morphology and valence alternations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020; MIN GRAD 'B'
Course Attributes: Global Studies, Latin American Studies

LING 1777 - SYNTACTIC THEORY

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction, stressing understanding of theoretical concepts, to the transformational generative approach to English sentence structure. This approach uses formal rules to produce sentences, and to explain how they are composed of phrases. The first part of the course concentrates on mechanical manipulation of systems of rules, aiming to acquaint the student with how the rules work. The second part concentrates on how syntacticians use evidence about a language to support or disconfirm their theories.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020; MIN GRAD 'B'

LING 1800 - SPECIAL TOPICS IN LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020

LING 1810 - STATISTICS FOR RESEARCH IN LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
The first goal of this course is to familiarize students with the major statistical tests, analysis strategies, and plotting conventions that are currently considered best practices in linguistics. The course accomplish these goals through a combination of reading (both of textbook chapters and empirical articles), in-class demos and hands-on practice, and homework exercises. The second goal is to make students comfortable using the R programming language for statistical computing. Assuming absolutely no prior background in statistics or programming, we will work from the ground up to turn you into a novice but proficient statistical programmer; by the end of this course, you will be able to read in your own data, perform basic data re-formatting and summary calculations, and conduct a wide variety of statistical analyses' all in R! The final goal is to get students thinking about how they can apply their new skills to their own research. In service of this goal, you will be required to write a short research paper that describes a data set you would like to work with, and that explains the statistical analyses you would perform in order to answer a small number of questions that are of interest to you.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 (MIN GRADE 'B'); PLAN: Linguistics

LING 1820 - LINGUISTICS IN THE LAB

Minimum Credits: 3
Maximum Credits: 3
This course is a bit different from other linguistics courses in that it is not focused on a particular subject area of linguistics, but rather an approach to doing linguistics: our goal is to learn how to think about, design, and implement a basic experiment. We will touch on a variety of topics that will be familiar from other courses: semantic representations, phonemic categories, sociolinguistic identity and stereotyping, and syntactic constituency. Satisfies the methods requirement for the major.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

LING 1844 - RESEARCH METHODS

Minimum Credits: 3
Maximum Credits: 3
Upon successful completion of this course, students will have a broad knowledge of the theoretical, philosophical, ethical, and practical issues of, and possibilities for, researching language in the field of linguistics. In addition to being able to evaluate the methods used in linguistics research, students will be able to choose the proper methods for their own studies and be able to articulate the reasons for choosing that methods or those methods. They will be able to design the broad outlines of the study and where and how to discover resources to fully develop those methods. They will also be able to coordinate the practical aspects of a study, such as participant recruitment, data management, and Institutional Review Board (IRB) approvals. The main goal for this course is that when students are given some linguistic question or problem, they have the experience and ability to think through appropriate research methods in order to answer such a question.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LING 1860 - INTRO TO HISTORICAL LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
A survey of the principles and methods of historical linguistics; practice in the basic techniques of historical linguistic research. The major topics to be studied are the analysis of sound change, analogic change, contact-induced language change, the relationship between variation (region al and social) and language change, the comparative method, and internal reconstruction.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1578 and 1773
Course Attributes: Global Studies

LING 1873 - ACCELERATED MORPHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Students in this course will: understand and define relevant concepts used to discuss morphology; explore the theoretical description of morphology; develop the ability to organize linguistic data as a first step in analysis / to apply key concepts to linguistic problems and original data; analyze complex words in languages other than English and determine the meanings of the parts; describe simply and appropriately how the derivational and/or inflectional morphemes behave in a particular language problem; compare competing analyses and provide justification for selecting one analysis over another; and, apply knowledge of morphology in reading empirical research with a critical eye, including articles that focus on a range of languages (i.e., Dutch, English, French, Frisian, German, Hungarian, Russian, Spanish, Swahili) and morphological phenomena (e.g., compounding, diminutivization, grammatical gender, number, mood, prefixation, etc.)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020 (MIN GRADE A-); CUM GPA >/= 3.25; PLAN: Linguistics

LING 1877 - ACCELERATED SYNTACTIC THEORY

Minimum Credits: 3
Maximum Credits: 3
This course will familiarize students with theoretical approaches in classic Principles and Parameters theory and the application of these approaches to some of the defining syntactic structures of English. Students will gain: knowledge of syntactic argumentation, how evidence from data is used incrementally to argue for and against theoretical proposals; the ability to apply syntactic theory to structures in languages other than English; and, insight into alternative approaches to syntactic theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020 (MIN GRADE A-); CUM GPA: 3.25; PLAN: Linguistics (BA)

LING 1878 - ACCELERATED PHONETICS AND PHONEMICS

Minimum Credits: 3
Maximum Credits: 3
In this course, students will acquire the conceptual framework and the practical skills to do further work in phonetics and phonology. Students will learn about: what a sound system is; which questions drive research on speech sounds; acoustics, the acoustic signal, and how it can be represented visually and measured; the acoustics of speech production and acoustics in relation to hearing and perception; and acoustic descriptions of sounds. At the end of the course, students will study articulatory phonetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020 (MIN GRADE A-); CUM GPA >/= 3.25; PLAN: Linguistics

LING 1879 - ACCELERATED PHONOLOGY

Minimum Credits: 3
Maximum Credits: 3
Phonology is the study of how sounds pattern in the languages of the world. Using this definition, students will try to understand what exactly people are doing when they study phonology. The course will be divided up into two main sections: In the first section, students will learn about the main concepts and analysis techniques that have traditionally formed the backbone of phonology. The focus will be on how to perform a formal phonological analysis and make a phonological argument. In the second section of the course, the focus will shift toward understanding how and why the field of phonology has evolved over time, in terms of both its subject matter and its methods. Students will work through some of the seminal texts in phonological theory and try to understand what each theory does well versus poorly. This course will help students to become better, more critical thinkers and writers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020 (MIN GRADE A-); and (LING 1578 or 1878); CUM GPA >/= 3.25; PLAN: Linguistics (BA)

LING 1900 - LINGUISTICS CONSULTING/INTERNSHIP: CONNECTING LINGUISTICS TO THE COMMUNITY AND INDUSTRY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

LING 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
This course provides an opportunity for students to formally pursue work on an individual basis.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

LING 1903 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 3
This course provides a hands-on opportunity for students to learn about linguistic research. By working with faculty and graduate students on approved projects, students can gain exposure to various aspects of research processes, such as data collection, data entry, linguistic analysis, and poster presentations. Students complete literature reviews, collect and/or analyze data, and write a research report.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

LING 1930 - APPLICATIONS OF LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
This course is a capstone course for undergraduate majors in linguistics. It should therefore be taken after nearly all other major requirements have been fulfilled. The topics to be covered are the crucial role a knowledge of linguistics plays in language teaching, the law (both interpretation of documents, courtroom discourse, forensic linguistics, and interpreting), communication disorders, archaeology, computational linguistics, and anthropology. Students will develop a portfolio of short papers, some of which are based on their own field research.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 1000 or CSD 1020; LVL: Junior or Senior; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

LING 1951 - LANGUAGES OF THE WORLD

Minimum Credits: 3
Maximum Credits: 3
This course is a survey of language classification, language structures, and language contact. It concentrates on two main questions: first, how do languages resemble, and differ from, each other in sounds, forms, and syntax? And second, what are some linguistic and sociopolitical results of situations in which two or more languages come into contact? The context for these investigations will be a study of selected language families, both in class and in individual student projects (including some elicitation of data from native speakers of various languages).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Marketing

BUSMKT 1040 - INTRODUCTION TO MARKETING

Minimum Credits: 3
Maximum Credits: 3
Provides an understanding of the roles of marketing in the economy and the firm, and develops a rationale for a marketing perspective as a guide to organizational and individual actions. Topics covered are the marketing environment, strategic planning, market segmentation, product development, pricing, distribution, promotion, consumer decision-making, control, and marketing management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: College of Business Admin; PROG: College of Business Admin; LVL: So, Jr, Sr

BUSMKT 1041 - INTRODUCTION TO MARKETING HONORS + 1

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted to College of Business Admin Students Only.

BUSMKT 1411 - MARKETING RESEARCH

Minimum Credits: 3
Maximum Credits: 3
Emphasizes the development of methods of decision making for marketing management. Formal tools of decision making are stressed. The collection and analysis of marketing data is viewed in the context of a management information system. Provides a common analytical framework for later courses treating specialized aspects of marketing in depth.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C') and (STAT 1000 or 1040 or 1100 or 1131 or MGMT 0024 or ECON 0204);PLAN: Acct,Fin,Gen Mgmt,Glbl Mgmt,Mrktng,Undclrd CBA,BIS,HRM,SCM

BUSMKT 1422 - PRINCIPLES OF SELLING

Minimum Credits: 3
Maximum Credits: 3
Selling is universal. Everyone uses persuasive communication to "sell" products, services, ideas, opinions, or points of view. Examine and practice the techniques and use the tools examined to develop and/or improve your sales skills. Focused on business-to-business sales, the concepts will apply to negotiating mutually beneficial agreements. From customer identification thru gaining agreement and follow-up, learn to identify customer problems and develop solutions that appeal to customers and benefit your organization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD: 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1425 - SALES FORCE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Responsible to implement the organization's strategic goals and create profit thru sales, the sales manager must plan, organize, implement, monitor and evaluate the sales function. The manager must assure alignment of goal, strategy, task, action and reward in the sales function to create "mutual benefit" with the customer. The manager's sales forecast drives the organization, while the sales tactics and strategies which the manager plans and oversees make those forecasts a reality. We will examine the sales management process and the evolving role of the manager.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRADE 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1426 - ADVERTISING AND SALES PROMOTION

Minimum Credits: 3
Maximum Credits: 3
Provides students with an understanding of advertising and the marketing process within which effective advertising and sales promotions are rooted. It is further designed to teach students to develop effective advertising and promotion plans. Emphasis will be placed on both theoretical and conceptual foundations and their applications to the fields of advertising and sales promotions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1427 - PUBLIC RELATIONS MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course will examine how public relations fits into the strategic management of organizations and how it impacts a firm's performance. Students will develop a competence in applying public relations principles to organizational opportunities and problems, with a focus on developing sound public relations writing skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1428 - DIGITAL AND SOCIAL MEDIA MARKETING

Minimum Credits: 3
Maximum Credits: 3
This course covers advertising, marketing, and communications strategies in the new media landscape where traditional and social media co-exist. The course will focus on 1) how social media strategies can be used effectively in marketing programs, 2) when they should/should not be used, 3) how to build them, and 4) how to measure, track, and evaluate their performance and effectiveness. This marketing strategy course will focus on analyzing, developing, implementing, and evaluating media strategies as an integral part of overall marketing strategy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRADE 'C')

BUSMKT 1429 - MARKETING COMMUNICATIONS IN AUSTRALIA

Minimum Credits: 3
Maximum Credits: 3
Marketing communications in Australia provides an understanding of the ways in which advertising is effectively planned to achieve the objectives set in the overall marketing plan. The concept of integrated marketing communication is introduced as an organizational tool and as a philosophy for campaign planning. Integrated marketing communication requires a total approach to planning advertising and promotions campaigns and coordinating communication strategies in support of overall brand and goods/services marketing objectives, and more broadly marketing strategy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSMKT 1430 - MARKETING COMMUNICATIONS IN BRITAIN

Minimum Credits: 3
Maximum Credits: 3
Marketing communications in Britain provides an understanding of the ways in which advertising is effectively planned to achieve the objectives set in the overall marketing plan. Home to the second largest global agency network, WPP - London (parent of major ad agencies Ogilvy & Mather, JWT, and Young & Rubicam, and universally recognized as the center for creative and production excellence), is an ideal place to learn about the industry that is "ad-land". Viewed from the us and elsewhere, a significant proportion of British advertising has a contempt for the hard sell, an antipathy to too much research, along with a penchant for irony and parody. This course is skewed to look at and assess the practice of advertising from this standpoint.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSMKT 1431 - PRODUCT DEVELOPMENT AND MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Addresses all stages of the product life cycle beginning with the various phases of new product development, including creativity and new product concept generation, concept testing and evaluation, pricing, demand forecasting and new product marketing strategies. Also deals with special challenges related to marketing mature products/services, improving marketing implementation effectiveness, and marketing the intangible features of products.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1435 - SERVICES MARKETING

Minimum Credits: 3
Maximum Credits: 3
The focus of this course is to develop the students' skills as marketers-broading tools learned in the intro course to include development of strategies and programs for service firms. Course utilizes problem solving techniques through presentation, discussion, and analysis of contemporary service marketing cases involving examples of consumer and business to business services in both large and small firms. The course is appropriate for 1) any student seeking a follow-up course to the basic marketing class; 2) students who plan marketing careers with service firms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1441 - CONSUMER BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
Focuses on the study of individual consumers through the integration of a wide variety of social science concepts and gaining familiarity with some of the more common techniques of consumer research methodology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors
Course Attributes: Global Studies

BUSMKT 1451 - RETAIL MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Emphasizes the strategic decisions for developing an enduring store image, and the marketing policies to produce customer satisfaction through service quality. Topics covered include store location, layout and atmosphere, logistics and information systems, merchandising, vendor relations and customer services, as well as topics related to non-store retailing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1461 - INTERNATIONAL MARKETING

Minimum Credits: 3
Maximum Credits: 3
International Marketing for Global Business Institute, Shanghai, China. Summer 2019
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD `C¿); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA Majors
Course Attributes: Global Studies, West European Studies

BUSMKT 1465 - PRICING STRATEGIES & TACTICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSMKT 1470 - SPORTS MARKETING

Minimum Credits: 3
Maximum Credits: 3
This course will provide a framework for understanding how various marketing strategies are formulated, implemented, and evaluated in sports context. Sports have been one of the major economic activities of our modern society, and knowledge of the role marketing plays in its operation has emerged as a valuable asset to all the parties involved (e.g., firms, governments, consumers, and players). The course is organized into two themes; 1) sports as product and 2) sports as medium. The first theme focuses on the applications of marketing theories and principles to promote sports and sport related products. It puts the students in the shoes of a marketing manager of a sports related business. The second theme, on the other hand, considers sports as one of the vehicles to promote a product or service. It covers how non-sport related businesses can benefit from utilizing sports as a part of their marketing communication program. Another area that will be discussed throughout the course is the role of ethics in sports marketing. What we sell in both sports as product and sports as medium is the positive values that sports represent. Therefore, sports often serve as a platform to promote the core values of our society and introduce positive change. This unique nature of sports marketing provides us with an opportunity to integrate the business aspects of sports and ethical perspectives in its marketing. Issues such as gambling, Title IX, performance enhancing drugs, and social responsibilities of sports organizations will be discussed in length whenever it is relevant to the course material.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSMKT 1481 - BRAND MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Exposes students to a wide range of marketing problems and provides them with the analytic perspectives and strategic marketing decision tools for analyzing and solving those problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1485 - PROJECTS IN MARKETING

Minimum Credits: 3
Maximum Credits: 3
BUSMKT 1485 connects undergraduate marketing students with prominent commercial/government clients to develop/implement specific marketing strategies. Students receive hands-on exposure to planning, strategy, research, advertising, public relations, event planning, and budgeting. Students demonstrate oral/written presentation skills via formal presentations to representatives from the client organizations.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: BUSMKT 1040 (MIN GRAD 'C'); PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSMKT 1490 - MARKETING INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The marketing internship provides business credits for project assignments that augment a professional marketing work experience.
Academic Career: Undergraduate

Course Component: Internship
Grade Component: Satisfactory/No Credit

BUSMKT 1495 - MARKETING INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of marketing issues or problems to which they have been introduced in other marketing courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

BUSMKT 1511 - MARKETING "MADE IN ECUADOR" TO THE WORLD

Minimum Credits: 1
Maximum Credits: 1
Historically, Ecuador sits at the contact zone of the Incan and Caari culture where trade through the spine of the Andes has been active for centuries. Currently, Ecuador is in the midst of building its brand to the world and is seen as the crucible of the chocolate industry. Promotion of the Galapagos, Yasuni Park and adventure travel on wild rivers has been part of the effort to showcase the best of the country to foreign markets. Ecuador's stunning volcanic peaks and rich tropical rainforest offer some of the greatest destinations on the planet along with unique and marketable resources of foods and culture. This course is designed to give you an understanding of Ecuador's natural and cultural assets including art, chocolate, ancient cities and adventure destinations and how to best market them to the world. This will be a hands-on experience where you will make your own chocolate, pottery and help locals prepare native crops as well as design promotions and refine and position their natural and cultural offerings for the global market. This is a real world experience that will be invaluable in your career as a marketer or employee in global enterprise.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Mathematics

MATH 0010 - COLLEGE ALGEBRA PART 1

Minimum Credits: 1.5
Maximum Credits: 1.5
First of a two course sequence which covers the topics of linear equations and inequalities and their graphs, quadratic equations and their graphs, and systems of equations and their graphs. This course is intended for students who need to learn elementary algebra over an extended period of time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MATH 0020 - COLLEGE ALGEBRA PART 2

Minimum Credits: 1.5
Maximum Credits: 1.5
Second of two courses (0010-0020) which covers polynomials, rational functions and exponential and logarithmic growth. This course is intended for students who need to learn algebra over an extended period of time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0010
Course Attributes: DSAS Algebra General Ed. Requirement

MATH 0025 - APPLIED COLLEGE ALGEBRA

Minimum Credits: 3
Maximum Credits: 3
This course is designed for non-math majors or non-science majors. This course will parallel the topics in MATH 0031, but will stress real life data, problem solving and the use of technology to aid in mathematical understanding.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Algebra General Ed. Requirement

MATH 0031 - ALGEBRA

Minimum Credits: 3
Maximum Credits: 3
The course covers basic algebra skills. Linear, polynomial, rational, exponential, and logarithmic functions are included. Systems of linear equations are also covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Algebra General Ed. Requirement

MATH 0032 - TRIGONOMETRY AND FUNCTIONS

Minimum Credits: 2
Maximum Credits: 2
This course is designed to enable students, who have mastered algebra, to learn trigonometry. Besides trigonometry, material of graphing and polynomials is included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0031 or 0110 or 0002 (MIN GRADE 'C') or MATH PLACEMENT SCORE (61 or GREATER)
Course Attributes: DSAS Algebra General Ed. Requirement

MATH 0100 - PREP FOR BUSINESS CALCULUS

Minimum Credits: 3
Maximum Credits: 3
This course will increase and reinforce the student's algebra skills by emphasizing the manipulation of formulas, the graphing of functions and the extensive use of problem solving. Topics include: an algebra review, functions and their graphs, systems of linear equations and inequalities, linear programming, interests and annuities, probability, data description, limits and continuity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MATH 0120 - BUSINESS CALCULUS

Minimum Credits: 4
Maximum Credits: 4
This course introduces the basic concepts of limits, continuity, differentiation, integration, maximization and minimization. Applications to the social sciences, especially business and economics, are stressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or 0031 or 0110 or 0002 (MIN GRADE 'C') or MATH PLACEMENT SCORE (61 or GREATER)
Course Attributes: DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Mathematics GE. Req.

MATH 0125 - CALCULUS FOR BUSINESS 1

Minimum Credits: 2
Maximum Credits: 2
This is the first half of a two course sequence (0125-0126). It will cover concepts such as limits, continuity, differentiation and integration. Maximization and minimization of functions will also be covered, with emphasis placed on applications in the social sciences, especially business and economics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or 0031 or 0110 or 0002 (MIN GRADE 'C') or MATH PLACEMENT SCORE (61 or GREATER)
Course Attributes: SCI Quantitative: Mathematics GE. Req.

MATH 0126 - CALCULUS FOR BUSINESS 2

Minimum Credits: 2
Maximum Credits: 2
This is the second half of the two sequence course (0125 0126). It provides an introduction to calculus for students in business, economics and other social sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0125
Course Attributes: DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Mathematics GE. Req.

MATH 0200 - PREP FOR SCIENTIFIC CALCULUS

Minimum Credits: 3
Maximum Credits: 3
A variety of topics are studied: functions, rational functions, logarithmic and exponential functions, graphs, asymptotes, inverse, conic sections, translation and rotation of axes, trigonometric identities and equations, and possibly vectors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or 0031 or 0110 or 0002 (MIN GRADE 'C') or MATH PLACEMENT SCORE (61 or GREATER)
Course Attributes: DSAS Algebra General Ed. Requirement

MATH 0205 - BRIDGE TO CALCULUS

Minimum Credits: 1
Maximum Credits: 1
The goal of the course is to fill the gap between Math 0120 Business Calculus and Math 0220 Calculus 1 in order for a student to fulfill Calculus requirement and/or meet a prerequisite for Math 0230 Calculus 2. The following topics are not covered in Math 0120 Business Calculus comparing to Math 0220 Calculus 1 and therefore will be covered by this course:-Trigonometric functions and their properties -Limits, derivatives, and integrals of functions that involve trigonometric functions -Linear Approximation -Indeterminate Forms and L'Hospital's Rule -Related Rates that involve trigonometric functions
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0120 (MIN GRADE 'C' or higher)

MATH 0220 - ANALYTIC GEOMETRY AND CALCULUS 1

Minimum Credits: 4
Maximum Credits: 4
This is the first of a sequence of three basic calculus courses. It covers the derivative and integral of functions of one variable and their applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0032 (MIN GRADE 'C') or MATH 0200 or 0132 or 0004 (MIN GRADE 'C') or MATH PLACEMENT SCORE (76 or GREATER) or MATH 0220 (No MIN GRADE) or MATH 0220 AP Credit
Course Attributes: Architectural Studies, DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Mathematics GE. Req.

MATH 0230 - ANALYTIC GEOMETRY AND CALCULUS 2

Minimum Credits: 4
Maximum Credits: 4
This is the second of a sequence of three basic calculus courses. It covers the calculus of transcendental functions, techniques of integration, series of numbers and functions, polar coordinates, and conic sections.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0220 or 0140 or 0221; MIN GRADE: 'C'

Course Attributes: Architectural Studies, DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Mathematics GE. Req.

MATH 0235 - HONORS 1 - VARIABLE CALCULUS

Minimum Credits: 4
Maximum Credits: 4
An enriched version of MATH 0220/0230. Course will cover same topics but in greater depth and with more challenging problems, computer experimentation and applications using maple. This course is intended for honors students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Mathematics GE. Req., University Honors Course

MATH 0240 - ANALYTIC GEOMETRY AND CALCULUS 3

Minimum Credits: 4
Maximum Credits: 4
This is the third of a sequence of three basic calculus courses. It covers vectors and surfaces in space and the calculus of functions of several variables including partial derivatives and multiple integrals, stokes theorem, and first order differential equations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0230 or 0231 or 0150 or 0235; MIN GRADE: 'C'
Course Attributes: DSAS Algebra General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Mathematics GE. Req.

MATH 0245 - HONORS 1- MULTIVARIABLE CALCULUS

Minimum Credits: 4
Maximum Credits: 4
An enriched version of MATH 0240. Course will cover same topics but in greater depth and with more challenging problems and applications. This course is intended for honors students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: MIN CUM GPA: 3.25
Course Attributes: University Honors Course

MATH 0250 - MATRIX THEORY & DIFFT EQUATIONS

Minimum Credits: 4
Maximum Credits: 4
The topics include matrix algebra, vector spaces, linear transformations, linear differential equations with constant coefficients, and systems of first order linear differential equations. Matrix techniques are used extensively in the differential equations part of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0230 or 0231 or 0150 (MIN GRADE 'C')

MATH 0280 - INTRO TO MATRICES & LINEAR ALG

Minimum Credits: 3
Maximum Credits: 3
The principal topics which this course will cover include vectors, matrices, determinants, linear transformations, eigenvalues and eigenvectors, and selected applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0220 or 0140 or 0221 or 0235 (Min Grade 'C')
Course Attributes: SCI Quantitative: Mathematics GE. Req., SCI Quantitative: Mathematics GE. Req.

MATH 0290 - DIFFERENTIAL EQUATIONS

Minimum Credits: 3
Maximum Credits: 3
This course presents an introduction to the theory of differential equations from an applied perspective. Topics include linear and nonlinear ordinary differential equations, Laplace transform, and introduction to partial differential equations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0230 or 0231 or 0150 or 0235; MIN GRADE: 'C'
Course Attributes: SCI Quantitative: Mathematics GE. Req.

MATH 0400 - FINITE MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
The course covers the basic concepts of set theory, logic, combinatorics, Boolean algebra, and graph theory with an orientation towards applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or 0031 or 0110 or 0002 (MIN GRADE 'C') or MATH PLACEMENT SCORE (61 or GREATER)
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Mathematics GE. Req.

MATH 0413 - INTRO THEORETICAL MATHEMATICS

Minimum Credits: 4
Maximum Credits: 4
This course is an introduction to the theoretical treatment of sets, functions, relations, numbers, sequences, and limits. Classwork and homework concentrate reading and writing of proofs of theorems centered on these topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0230 or 0235 or 0231 or 0150; and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: SCI Quantitative: Mathematics GE. Req., Writing Requirement Course

MATH 0420 - INTRO THEORY 1-VARIABLE CALCULUS

Minimum Credits: 3
Maximum Credits: 3
The course provides a careful treatment of the theoretical concepts of limit, continuity, derivative and integral, including the fundamental theorem of calculus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0413 or MATH 0450
Course Attributes: SCI Quantitative: Mathematics GE. Req.

MATH 0430 - INTRO ABSTRACT ALGEBRAIC SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to abstract algebraic concepts, rings, integral domains, fields, integers, rational, real and complex numbers, and polynomials. Many examples will be presented during class and in the homework. The students are expected to enhance their proof writing techniques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0413 or 0450 or 1185
Course Attributes: SCI Quantitative: Mathematics GE. Req.

MATH 0450 - INTRODUCTION TO ANALYSIS

Minimum Credits: 4
Maximum Credits: 4
This course is intended as a first course in mathematical analysis for highly motivated students. Topics will include sets and functions, number systems, topology of Euclidean spaces, limits, continuity, and the main theorems of elementary calculus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: SCI Quantitative: Mathematics GE. Req., Writing Requirement Course

MATH 0470 - ACTUARIAL MATHEMATICS 1

Minimum Credits: 3
Maximum Credits: 3
This course will cover the material listed in the syllabus for mathematics of finance of the society of actuaries. Specifically it will present the relevant topics in the theory of interest (interest and discount rates, cash flows, annuities, amortization and sinking funds, bonds) and investment (stocks, capital asset pricing model, arbitrage pricing theory, portfolios, options). The material will be presented in the traditional academic format of lectures and help sessions along with optional sessions directed specifically at preparing students for the SOA exam.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: MATH 0230 or 0231 or 0150 or 0235
Course Attributes: SCI Quantitative: Mathematics GE. Req.

MATH 0480 - APPLIED DISCRETE MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to introduce first or second year students to important discrete structures that appear in both pure and applied math as well as computer science, computer engineering, computer security and information systems. Math 0480 will be an excellent preparation for classes in Combinatorics, Graph Theory, Algebra and Number Theory. Topics include sets, functions, sequences, algorithms, growth of functions, complexity of algorithms, induction, counting, discrete probability, graphs and trees, discrete geometry, network flows, the Traveling Salesperson Problem and discrete optimization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0220

MATH 0500 - PROFESSIONAL DEVELOPMENT

Minimum Credits: 1
Maximum Credits: 1
The Professional Development course is a 1-credit course required of all Mathematics majors. It will assist students to progress through the major and toward their career goals, and to attain skills in technical writing and programming.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: MATH 0413 or MATH 0450

MATH 1010 - PUTNAM SEMINAR

Minimum Credits: 2
Maximum Credits: 2
The aim of this course is to develop the capacity to solve mathematical problems involving a substantial element of ingenuity and perseverance. Training will involve the study of problems from previous Putnam competitions, for which this course can be regarded as a useful preparation. An attempt will be made to look for unifying mathematical ideas. General strategies for solving problems will also be discussed.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: University Honors Course

MATH 1020 - APPLIED ELEMENTARY NUMBER THEORY

Minimum Credits: 3
Maximum Credits: 3
This course will reveal the key role played by number theory in the development of mathematics. Some applications of number theory will be covered in the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0430

MATH 1025 - INTRODUCTION TO MATHEMATICAL CRYPTOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
The course covers the theoretical underpinnings of cryptosystems and the analysis of their limitations and vulnerabilities. Special emphasis will be placed on public key cryptosystems, including elliptic curve based systems. Real world applications such as browser security and bitcoin will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0430

MATH 1050 - COMBINATORIAL MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
Topics covered include the binomial theorem, inclusion exclusion principle, recurrence relations, generating functions, and coloring problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0413 or 0450 or 1185

MATH 1070 - NUMERICAL MATHEMATICAL ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course, with MATH 1080 forms a two term introduction to numerical analysis at the advanced undergraduate level and includes interpolation, numerical differentiation and integration, solution of non-linear equations, numerical solution of systems or ordinary differential equations, and additional topics as time permits. Emphasis is on understanding the algorithms rather than on detailed coding, although some programming will be required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0240 or 0241 or 0201 or 0245

MATH 1080 - NUMERICAL MATH: LINEAR ALGEBRA

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to numerical linear algebra which addresses numerical methods for solving linear algebraic systems and matrix Eigen problems and applications to partial differential equations. Although the course will stress a computational viewpoint, analysis of the convergences and stability of the algorithms will be investigated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (MATH 0240 or 0245 or 0241 or 0201) and (MATH 0250 or 0280 or 1180 or 1185)

MATH 1100 - LINEAR PROGRAMMING

Minimum Credits: 3
Maximum Credits: 3
Topics covered will include linear programming problems, the simplex method, quality, revised simplex method, and the transportation problem.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0280 or 1180 or 1185; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)

MATH 1101 - AN INTRODUCTION TO OPTIMIZATION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the techniques of optimization. Applications will be emphasized, but some theory will be addressed and proofs will be discussed. As well, students will be taught how to use available software to answer questions. Course topics will include linear programming, integer programming, nonlinear programming, convex and affine sets, convex and concave functions, unconstrained optimization, and combinatorial optimization (i.e. Network flow problems).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0240 and (MATH 0280 or 1180 or 1185)

MATH 1103 - MATHEMATICAL PROBLEMS IN BUSINESS, INDUSTRY, AND GOVERNMENT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MATH 1110 - INDUSTRIAL MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
This course is concerned with the approximate numerical solution of problems which arise in an industrial environment. Topics covered include physical interpretation of a mathematical model, use of library software, preparation of software, analysis of results, and reporting on findings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 1180 and 1185

MATH 1119 - APPLIED PROBABILITY FOR ACTUARIAL MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
This course covers standard topics in probability and their applications to actuarial risk management. It prepares students for the probability exam offered by the Society of Actuaries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0230 or 0231 or 0150

MATH 1121 - ACTUARIAL MATHEMATICS 2

Minimum Credits: 3
Maximum Credits: 3
This course will cover the material listed in the syllabus for exam m (3) (mathematics of life contingencies and financial economics) of the society of actuaries. Specifically it will present the relevant topics in life insurance and life annuities, including multiple decrement models as well as the black and Scholes pricing of derivative securities and risk analysis. The material will be presented in the traditional academic format of lectures and help sessions along with optional sessions directed specifically at preparing students for the SOA exam.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0470 or 1120
Course Attributes: Capstone Course

MATH 1122 - ACTUARIAL MATHEMATICS 3

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0470 or 1120) and (MATH 1119 or STAT 1151)

MATH 1123 - ACTUARIAL MATHEMATICS 4

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MATH 1124 - ACTUARIAL MATHEMATICS 5

Minimum Credits: 3
Maximum Credits: 3
This 3-credit course will cover the topics in "Short-Term Actuarial Mathematics 1" that provides the basis for a subsequent course in "Short-Term Actuarial Mathematics 2" as well as prepare students for the SOA STAM Exam. Students will be introduced to a variety of frequency, severity, and aggregate models that are useful for short-term actuarial applications. Students will learn the steps involved in the modeling process and how to apply these steps. At the end of the course, students will be able to: 1) analyze data from an application in a business context; 2) determine a suitable model including parameter values; 3) provide measures of confidence for decisions based upon the model. Students will be introduced to a variety of tools for the calibration and evaluation of the models.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MATH 1126 - PREDICTIVE ANALYTICS 1

Minimum Credits: 3
Maximum Credits: 3
This is an introductory topics course in modern Data Science, including Statistical Learning and Time Series. The topics that will be covered are: Linear Regression (Validation, Resampling Methods, Model Selection and Regularization, Shrinkage, Dimension Reduction, Principal Components), Generalized Linear Models (Logistic and Probit Regression Models, Categorical and Count Response, Measures of Fit), Unsupervised Learning (Decision Trees and Random Forests, Bootstrap, Bagging, Principal Components, Cluster Analysis), Time Series (Random Walk Models, Autoregressive Models, ARCH/GARCH Models, Box-Jenkins Modeling and Forecasting).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0230 and MATH 1119

MATH 1127 - PREDICTIVE ANALYTICS 2

Minimum Credits: 3
Maximum Credits: 3
This 3-credit course is a continuation of Math 1126, "Predictive Analytics 1". It will cover the fundamental knowledge about data science with applications to insurance and business. Students will be introduced to Basic R, data acquisition, data cleanup, data exploration and visualization, predictive modeling, and professional reporting. It also prepares students for the SOA Exam PA. Upon completion of this course, students will have developed skills in predictive analytics that allow them to: (1) articulate the types of problems that can be addressed by predictive modeling, identify the business problem and how the available data relates to possible analyses, use the information to propose models such as Generalized Linear Model (GLM), Decision Trees, Cluster and Principal Components Analysis; (2) develop expertise in the use of R for predictive analytics and be able to create effective graphs in RStudio, work with various data types, understand principles of data design, and construct a variety of common visualizations for exploring data; (3) evaluate data quality, resolve data issues, and identify regulatory and ethical issues; (4) effectively communicate the results of applying predictive analytics to solve a business problem.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 1126

MATH 1128 - ACTUARIAL MATHEMATICS 5

Minimum Credits: 3
Maximum Credits: 3
This 3-credit course will cover the topics in "Short-Term Actuarial Mathematics 1" that provides the basis for a subsequent course in "Short-Term Actuarial Mathematics 2" as well as prepare students for the SOA STAM Exam. Students will be introduced to a variety of frequency, severity, and aggregate models that are useful for short-term actuarial applications. Students will learn the steps involved in the modeling process and how to apply these steps. At the end of the course, students will be able to: 1) analyze data from an application in a business context; 2) determine a suitable model including parameter values; 3) provide measures of confidence for decisions based upon the model. Students will be introduced to a variety of tools for the calibration and evaluation of the models.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 1119 and STAT 1152

MATH 1129 - ACTUARIAL MATHEMATICS 6

Minimum Credits: 3
Maximum Credits: 3
This 3-credit course will cover the topics in "Short-Term Actuarial Mathematics 2" (STAM 2) which builds on topics in STAM 1 as well as prepare students for the SOA STAM Exam. Students will be introduced to credibility theory: prior distribution, posterior distribution, predictive distribution, Bayesian premium, Buhlmann model, Buhlmann-Straub models, credibility premium, credibility factor and empirical Bayes methods. At the end of the course, students will be able to: 1) understand and estimate losses using credibility procedures; 2) understand the fundamental principles of pricing and reserving of some of the more common short-term insurance and reinsurance coverages: auto, homeowners, liability, health, disability, and dental. Students will be introduced to some of the methods and the underlying statistical models used for estimating losses incurred from short-term insurance and reinsurance coverages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 1128

MATH 1180 - LINEAR ALGEBRA 1

Minimum Credits: 3
Maximum Credits: 3
This course stresses the theoretical and rigorous development of linear algebra. Major topics include the theory of vector spaces, linear transformations, matrices, characteristic polynomials, bases and canonical forms. Other topics may be covered as time permits.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: MATH 0413 or MATH 0450

MATH 1185 - HONORS LINEAR ALGEBRA

Minimum Credits: 3
Maximum Credits: 3
An introduction to computational and theoretical aspects of linear algebra. Syllabus includes Gaussian elimination, matrix algebra, triangular factorization, vector spaces, linear independence, basis, dimension, orthogonality, inner product, gram-Schmidt, singular value decomposition, determinants, eigenvalues, matrix exponentials, unitary matrices, similarity, positive definiteness, minimum principles, finite elements, norm and condition number, computation of Eigen values, iterative solutions of linear systems, linear inequalities, simplex method.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: University Honors Course

MATH 1230 - THE BIG IDEAS OF MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
The "big ideas" course is intended to provide a capstone type experience for math majors. It will integrate the student's current math knowledge into a coherent whole via the adoption of a historical perspective. It is particularly aimed at math majors with an interest in math education or the history, philosophy and psychology of mathematics. Students opting for the optional internship, MATH 1231, will explore how the historical development of math relates to the math in the secondary school. The capstone experience will culminate with a research project and presentation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0430, and ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

MATH 1231 - MATH EDUCATION INTERNSHIP 1

Minimum Credits: 1
Maximum Credits: 1
This internship has two components 1) a classroom experience mentoring a high school student who is developing a research project and 2) a seminar discussing the "big ideas" of mathematics in MATH 1230 and how math is developed in the elementary and secondary school curriculum. Interns will spend one hour every two weeks mentoring a high school student at an area high school.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: MATH 1230

MATH 1250 - ABSTRACT ALGEBRA

Minimum Credits: 3
Maximum Credits: 3
In this course the basic algebraic systems, groups and rings are studied in some detail. Topics include: subgroups, permutation groups, homomorphism's, subrings, ideals and quotient rings. The emphasis is on theory with examples.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0430

MATH 1270 - ORDINARY DIFFERENTL EQUATIONS 1

Minimum Credits: 3
Maximum Credits: 3
This course covers methods of solving ordinary differential equations which are frequently encountered in applications. General methods will be taught for single n-th order equations, and systems of first order nonlinear equations. This will include phase plane methods and stability analysis. Computer experimentation will be used to illustrate the behavior of solutions of various equations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0280 or 1180 or 1185

MATH 1275 - HONORS ORDINARY DIFFERENTIAL EQUATIONS 1

Minimum Credits: 3
Maximum Credits: 3
This course provides a more thorough mathematical treatment of the theory than is possible in the non-honors course (MATH 1270), and also covers some more recent applications. In addition to basic material on exact solutions, mathematical proofs will be given of the existence and uniqueness theorems, leading to a better understanding of such important topics as phase plane behavior and stability theory. In addition, more topics will be covered, including a more extensive discussion of series solutions and special functions than is possible in MATH 1270. Finally, a course project, usually done in pairs, on a topic to be chosen by the students with guidance and approval from the instructor, will be a key feature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (MATH 0230 or 0231 or 0150 or 0235) and (MATH 1180 or 1185); CREQ: MATH (0413 or 0450)
Course Attributes: University Honors Course

MATH 1280 - ORDINARY DIFFERNTL EQUATIONS 2

Minimum Credits: 3
Maximum Credits: 3
This is a course in stability and qualitative methods for analyzing ordinary differential equations which arise in realistic models. Phase plane techniques, perturbation methods, and bifurcation theory are studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 1270 OR 1275

MATH 1290 - TOPICS IN GEOMETRY

Minimum Credits: 3
Maximum Credits: 3
A course intended to give a "modern" view of geometry. Possible approaches include (1) the connection of geometries to abstract algebraic systems and (2) the deductive, synthetic development of Euclidean and non-Euclidean geometry.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0240 or 0241 or 0201 and (MATH 0413 or MATH 0450)

MATH 1310 - GRAPH THEORY

Minimum Credits: 3
Maximum Credits: 3
The concept of a graph and the study of its theoretical properties and applications form the core of this course. Topics include paths, circuits, trees, planar graphs, coloring problems, digraphs, matching theory, and network flows.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0413 or 0450

MATH 1350 - INTRODUCTION TO DIFFERENTIAL GEOMETRY

Minimum Credits: 3
Maximum Credits: 3
Possible topics are the basic ideas of topology, description of curves in space, definition and local study of smooth surfaces in Euclidean space (fundamental forms, geodesics, and curvature), global properties of surfaces, gauss-bonnet formula and applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0240 or 0241 or 0201 and (MATH 1180 or 1185)

MATH 1360 - MODELING IN APPLIED MATH 1

Minimum Credits: 3
Maximum Credits: 3
This course introduces some of the fundamental approaches of applied mathematics. The emphasis is on the model-building process and on developing an understanding of some of the unifying themes of applied mathematics such as equilibria, stability, conservation laws, etc. The material is presented in the form of case studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0290 or 1270 or 1275

MATH 1370 - INTRODUCTION TO COMPUTATIONAL NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course presents contemporary mathematical theories of neuroscience, including single neurons and neuronal networks. Attention will be given

to the dynamics and the function of neural activity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0240 or 0241 or 0201 or MATH 0450 or MATH 0245

MATH 1380 - MATH BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will provide a broad introduction to mathematical methods typically applied to problems in biology. Models using calculus, ordinary differential equations, partial differential equations, discrete dynamical systems, stochastic dynamics, or a cellular automata framework will be presented and principal methods for their analysis will be described. Computational methods will also be covered, including computing platforms such as XPPAUT. Throughout the course, students will have extensive opportunities to practice the development and analysis of mathematical biology models.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0240 or 1180 or 1185) and (MATH 0290 or 1270 or 1275)

MATH 1410 - INTRODUCTION FOUNDATIONS OF MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
This course introduces the logical foundations of mathematics; it covers the propositional and predicate calculi, formal number theory, set theory, and beginning model theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0413 or MATH 0450

MATH 1470 - PARTIAL DIFFERENTIAL EQUATIONS 1

Minimum Credits: 3
Maximum Credits: 3
This is the first term of a two-term sequence in elementary PDE's. The objectives of the course are to provide students with the techniques necessary for the formulation and solution of problems involving PDE's and to prepare for further study in PDE's. The three main types of second order linear PDE's - parabolic, elliptic, and hyperbolic are studied. In addition the tools necessary for the solution of PDE's such as Fourier series and Laplace transforms are introduced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0240 or 0240 or 0201 and {[(MATH 0280 or 1180 or 1185) and (0290 or 1270)] or 0250}

MATH 1510 - MATHEMATICAL THEORY OF PROBABILITY

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the mathematical theory of probability. Major topics include random variables, expecation, characteristic functions, conditional probability, and an introduction to Martingales and Markov chains.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (MATH 0420 or 0450) and (MATH 0280 or 1180 or 1185) or Permission From Instructor

MATH 1530 - ADVANCED CALCULUS 1

Minimum Credits: 3
Maximum Credits: 3
This course contains a rigorous development of the calculus of functions of a single variable, including compactness on the real line, continuity, differentiability, integration, and the uniform convergence of sequences and series of functions. Other topics may be included, such as the notion of limits and continuity in metric spaces.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0420 or 0450

MATH 1540 - ADVANCED CALCULUS 2

Minimum Credits: 3
Maximum Credits: 3
This course, a continuation of MATH 1530, covers the theory of limits, differentiation, and integration of functions of several variables.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 1530

MATH 1550 - VECTOR ANALYSIS AND APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
Topics covered include: vector algebra, vector differentiation and integration, divergence, gradient, curl, the theorems of green, gauss and stokes, and curvilinear coordinate systems. There will be an emphasis upon problem solving and applications in electromagnetic theory and fluid flow.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0240 or 0241 or 0201 and (0250 or 0280 or 1180 or 1185)

MATH 1560 - COMPLEX VARIABLES & APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
This course covers the following topics: elementary operations with complex numbers, derivatives, integrals, Cauchy's theorem and consequences such as the integral formula, power series, residue theorem, applications to real integrals and series.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [MATH 0240 or 0241 or 0201 or MATH 0245 (MIN GRADE 'B') for all] or MATH 1550

MATH 1570 - INTRODUCTION TO FOURIER ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
The course is a rigorous introduction to Fourier series and integrals with applications to heat flow, wave motion, physics, and number theory. It is intended for students with a basic knowledge of real analysis including uniform convergence of sequences and series of functions. No knowledge of the Lebasque integral is assumed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (MATH 0420 or 0450) AND (MATH 0280 or 1180 or 1185)

MATH 1700 - INTRODUCTION TO TOPOLOGY

Minimum Credits: 3
Maximum Credits: 3
The topology of r1, as well as that of general metric spaces, will be studied. Basic notions will be applied to obtain the fundamental existence theorem for first order ordinary differential equations. The course will be run on a theorem proving and problem solving basis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0420 or 0450

MATH 1800 - ADVANCED TOPICS IN MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
This course seeks to provide a broad introduction to the field of machine learning. The emphasis of this course will be the development of a rigorous mathematical basis for the most commonly used algorithms in the field. Topics to be covered include clustering, dimensionality reduction, regression, optimization, and neural networks. Students will have the opportunity to implement algorithms from these topics and examine their performance on real data. A background in multivariable calculus and linear algebra is recommended. Prior programming experience is not required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0240 or 0241 or 0201 or MATH 0280 or MATH 1180

MATH 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Under faculty supervision the student participates in a mathematics related experience, project, or job.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

MATH 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
Under the direction of a faculty member, a student studies a mutually agreed upon topic in mathematics.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Mechanical Engr and Materials Science and Engr

ME 0024 - INTRODUCTION TO MECHANICAL ENGINEERING DESIGN

Minimum Credits: 3
Maximum Credits: 3
Provides knowledge of design graphics and manufacturing processes by conventional and computer-aided methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0011 or ENGR 0711 or ET 0011; PROG: School of Engineering

ME 0051 - INTRO THERMO-FLUIDS ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Synthesis of the basic concepts from thermodynamics and fluids, including: properties of pure substances, first law analysis, and introduction to the second law; fluid statics, kinematics, stress, and viscosity; and control volume analysis of the conservation equations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0175 or 0476 or 0202 or 0152) and (CHEM 0960 or 0760 or 0710 or 0111 or 0110 or 0101); CREQ: MATH 0290 or 1271 or 0202 or 0135; PROG: School of Engineering

ME 1085 - DEPARTMENTAL SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Seminars are designed to acquaint the student with aspects of engineering not normally encountered in classes and include a wide range of topics such as the significance of engineering as a profession and the relation of engineering to current social problems.
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

ME 1097 - SPECIAL PROJECTS

Minimum Credits: 1
Maximum Credits: 4
Investigation and research embodying testing, original design, or research on an approved subject; or, a special problem or reading course of individual study guided by an approved departmental faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

MEMS 0024 - INTRODUCTION TO MECHANICAL ENGINEERING DESIGN

Minimum Credits: 3
Maximum Credits: 3
Fundamentals of the design process, basic techniques of graphic communication, and an introduction to the most common mechanical components and manufacturing processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0011 or 0015 or 0711 or ET 0011; PROG: School of Engineering

MEMS 0031 - ELECTRICAL CIRCUITS

Minimum Credits: 3
Maximum Credits: 3
Fundamental laws, principles, and analysis techniques for DC and AC linear circuits whose elements consist of passive and active components used in modern engineering practice, including the determination of steady-state and transient responses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0175 or 0476 or 0152 or 0202); CREQ: (MATH 0290 or 1271 or 1035 or 0202); PROG: School of Engineering

MEMS 0040 - MATERIALS AND MANUFACTURING

Minimum Credits: 3
Maximum Credits: 3
Manufacturing and processing of ceramics, metals, polymers and composites covering refining and synthesis, shaping methods, control of properties and process selection.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0022 or MET 1162; PROG: School of Engineering

MEMS 0048 - THERMODYNAMICS OF MATERIALS

Minimum Credits: 3
Maximum Credits: 3
This course teaches the essentials of thermodynamics of materials, which concerns the basic concepts and principles of thermodynamics, and the application of thermodynamic principles to the analysis of multitude phenomena related to the behavior of materials. The course covers topics on the laws of thermodynamics, relation between work, heat and energy, entropy, free energy, phase equilibrium in one-component system, chemical reactions involving gases, and chemical reactions involving both solids and gases.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0150 or 0174 or 0201 or 0475) and (CHEM 0101 or 0110 or 0111 or 0410 or 0710 or 0760 or 0960); PROG: Swanson School of Engineering

MEMS 0051 - INTRODUCTION TO THERMODYNAMICS

Minimum Credits: 3
Maximum Credits: 3
Basic concepts and interlinking relationships of thermodynamics, fluid mechanics and heat transfer; fluid statics; system and control volumes; thermodynamic properties; work and heat; first law of thermodynamics for control mass and control volume; integral forms of conservation of mass and momentum.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0150 or 0174 or 0201 or 0475) and (CHEM 0101 or 0110 or 0111 or 0410 or 0710 or 0760 or 0960); PROG: School of Engineering

MEMS 0071 - INTRODUCTION TO FLUID MECHANICS

Minimum Credits: 3
Maximum Credits: 3
Fundamentals of fluid mechanics, with emphasis on inviscid and linearly viscous, incompressible fluids. Basic physical phenomena of fluid mechanics. Fluid kinematics. Governing equations (both integral and local forms). Exact solutions. Internal flows. Dimensional analysis and modeling.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (PHYS 0152 or 0175 or 0202 or 0476) and (CHEM 0102 or 0112 or 0120 or 0720 or 0770 or 0970); CREQ: MATH 0290; PLAN: Mechanical Engineering (BSE) PROG: Swanson School of Engineering

MEMS 1010 - EXPERIMENTAL METHODS IN MATERIALS SCIENCE AND ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
Principles and techniques of optical metallography: imaging and quantitative analysis. Mechanical testing techniques, electron microscopy and chemical analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0022 or MET 1162; PROG: School of Engineering

MEMS 1011 - STRUCTURE AND PROPERTIES LAB

Minimum Credits: 3
Maximum Credits: 3
Experimental demonstrations of important structure-property relationships for metals, ceramics and polymers.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 1010; PROG: School of Engineering

MEMS 1014 - DYNAMIC SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Modeling and analysis of physical systems. Time- and frequency-domain analyses; transient and steady state system response to various excitations; transfer function and state space model representations; Laplace and Fourier transforms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: [(ENGR 0012 or 0016) or (ET 0023 and 0030)] and (MEMS 0031 or ME 0031 or ECE 0031 or EET 0110) and (MATH 0280 or 0206 or 1180 or 1181 or 1035) and (MEMS 1015); PROG: School of Engineering

MEMS 1015 - RIGID-BODY DYNAMICS

Minimum Credits: 3
Maximum Credits: 3
Dynamics of particles, systems of particles, and rigid bodies including energy and momentum methods, problems of varying forces and constraints, and relationship of motion to different reference frames.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (MATH 0240 or 0241 or 0201) and (ENGR 0135 or 0131 or ET 0051); PROG: School of Engineering

MEMS 1020 - MECHANICAL VIBRATIONS

Minimum Credits: 3
Maximum Credits: 3
Review of free and forced vibrations of single-degree-of-freedom systems with and without damping, multi-degree of freedom systems, vibration isolation, nonlinear vibrations, LaGrange's equations, and vibration of continuous systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ME 1014 or MEMS 1014 or BIOENG 1255; PROG: School of Engineering

MEMS 1028 - MECHANICAL DESIGN I

Minimum Credits: 3
Maximum Credits: 3
Stress and deflection analysis; survey of mechanical design criteria; selection and applications of working stresses for ductile and brittle materials; static, fatigue, and impact loading and combination of stresses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0141 or 0145 or ET 0053 or BIOENG 1630; PROG: Undergraduate School of Engineering

MEMS 1029 - MECHANICAL DESIGN II

Minimum Credits: 3
Maximum Credits: 3
Analysis and design of machine elements, components, and mechanical systems. Machine elements include shafts, keys, bearings, gears, belts, chains, springs, screws, and motors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ME 0024 or MEMS 0024 or ET 0035) and (ME 1028 or MEMS 1028); PROG: School of Engineering

MEMS 1030 - MATERIAL SELECTION

Minimum Credits: 3
Maximum Credits: 3
Methodology for materials selection in mechanical design processes. Includes: (i) design process and consideration, (ii) criteria for materials and their shape selection, and (iii) design case study. Mechanical components have mass; they carry loads; they conduct heat and electricity; they are exposed to wear and to corrosive environments; they are made of one or more materials; they have shape; and they must be manufactured. This course provides knowledge on how these activities are related.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0022 or MET 1162) and (ME 1028 or MEMS 1028); PROG: School of Engineering

MEMS 1032 - AUTOMOTIVE DESIGN AND FABRICATION

Minimum Credits: 3
Maximum Credits: 3
Covers the basics of automotive fabrication. Students working as one team have the opportunity to experience hands-on application of both classical and modern manufacturing techniques while adhering to a very strict externally imposed deadline. The team effort culminates in the production of a high-performance automobile.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

MEMS 1033 - FRACTURE MECHANICS FOR PRODUCT DESIGN AND MANUFACTURING

Minimum Credits: 3
Maximum Credits: 3
An introduction to the principles of fracture mechanics; the essential concepts underlying appropriate materials selection including the effects of shape selection for maximum performance; and the strengths and weaknesses inherent in the choice of, say, metals versus ceramics versus polymers, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0022 or MET 1162) and (ME 1028 or MEMS 1028); PROG: School of Engineering

MEMS 1035 - COMPOSITE MATERIALS DESIGN AND APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
Extensive uses of composites can be seen in several aspects of engineering applications. Industrial sectors, such as in wind turbines, oil and natural gas exploration and production, natural gas and hydrogen vehicle storage tanks, high-speed and precision machinery, etc., are today the largest user of composites, surpassing aerospace industries. Other applications are in semiconductor manufacturing equipment; automobile engines, bodies, brakes and clutches; energy storage flywheels; gas turbine engines; process industries equipment; data storage equipment; medical diagnostic equipment; prosthetics and orthotics, etc. The advantages of composite materials stem from their outstanding strengths and stiffnesses, low densities, in addition to their unique and tailorable physical properties, including good thermal conductivities compared to copper and thermal expansions that can be varied from high to near zero. Composites, such as metallic, ceramic and carbon materials have both high-temperature and low-temperature capabilities, making them useful in high temperature regimes, e.g. in gas turbine engines, automobile and aircraft brakes. This course offers an in-depth presentation of design, analysis and manufacturing methods for composites, with particular reference to polymer matrix composites. For an efficient use of composites in lightweight structural design applications, this course offers the needed fundamental understanding of the structure, properties, and mechanics of composite materials. A typical mechanical analysis and design of composite structures, which are significantly more complex than those of their metallic equivalents due to the anisotropic nature of laminated composite materials, will be presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 0040 and MEMS 1070; PLAN: Swanson School of Engineering

MEMS 1038 - FUNDAMENTALS OF ENGINEERING PROJECTS

Minimum Credits: 1
Maximum Credits: 1
This course will focus on the development of professional skills required for successful engineering projects. The central objective will be to prepare foundation skills relevant to the senior design course. Course topics will include: project management tools, professional standards and codes, prototype development, design for manufacturing, GD&T;, oral presentation skills and presentation of engineering data.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

MEMS 1041 - MECHANICAL MEASUREMENTS 1

Minimum Credits: 3
Maximum Credits: 3
Fundamentals of mechanical measurements including steady-state and dynamic signals, detector-transducer elements, signal conditioning and readout systems, standards, instrument calibration, statistical treatment of data, error analysis, and technical report writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0141 or 0145 or ET 0053 or BIOENG 1630) and (ME 0031 or MEMS 0031 or ECE 0031 or EET 0110 or BIOENG 1310); CREQ: ME 1014 or MEMS 1014 or BIOENG 1255; PROG: School of Engineering

MEMS 1042 - MECHANICAL MEASUREMENTS 2

Minimum Credits: 3
Maximum Credits: 3
Builds on the foundation of mechanical measurements provided in MEMS 1041 to provide students with the ability to properly design and perform an experiment on a complex mechanical system in order to determine specific characteristics or performance of that system. Specific material includes extended knowledge of statistics and error analysis, computer-based data acquisition, and technical communications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ME 1041 or MEMS 1041); PROG: School of Engineering

MEMS 1043 - SENIOR DESIGN PROJECT

Minimum Credits: 3
Maximum Credits: 3
A major project involving literature search, planning, design, fabrication, experimentation, analysis, technical report, poster presentation, and presentation at a technical symposium is performed by a small team of students under the direction of a faculty advisor and corporate advisor on a project presented by the corporate advisor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: Sr; PROG: School of Engineering
Course Attributes: Capstone Course

MEMS 1045 - AUTOMATIC CONTROLS

Minimum Credits: 3
Maximum Credits: 3
Modeling of mechanical systems and classical feedback control theory for single-input-single-output systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ME 1014 or MEMS 1014 or BIOENG 1255); PROG: School of Engineering

MEMS 1047 - FINITE ELEMENT ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
The finite element method applied in solid mechanics, fluid mechanics, and heat transfer.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 1028; PROG: School of Engineering

MEMS 1048 - ANALYSIS AND CHARACTERIZATION AT THE NANO-SCALE

Minimum Credits: 3
Maximum Credits: 3
This course offers a survey of micro-analytical, microscopy and diffraction methods that are widely used for the analysis of composition, chemistry, structure, scale and morphology of advanced materials. It introduces the most basic concepts required to understand experimental data obtained with these modern techniques. The main objectives of the course are to enable students to interpret and evaluate relevant data sets presented in the research literature and to identify experimental tools to solve a given Nano-research characterization problem. Some prerequisite basic knowledge of the structure of solid matter (e.g. crystals and amorphous materials), diffraction methods (e.g. X-ray diffraction) and processing-property-structure relationships in materials is expected.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

MEMS 1049 - MECHATRONICS

Minimum Credits: 3
Maximum Credits: 3

An introduction to mechatronics, or the interfacing of mechanical and electrical systems. Focus is on embedded controllers (Motorola 68hc11 and pic 16f84) and their programming, power and interfacing electronics, actuators, sensors, and integration of these components to create a complete functional mechatronic system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ME 1014 or MEMS 1014) and (MEMS 0031); PROG: School of Engineering

MEMS 1051 - APPLIED THERMODYNAMICS

Minimum Credits: 3
Maximum Credits: 3
Thermodynamic processes involving energy and entropy changes in real and ideal gases, vapors, and liquids, and mixtures of those fluids. Basic thermodynamic cycles (vapor and gas power, refrigeration, and heat pumps). Discussion of thermodynamic relations for simple compressible substances and introduction to psychometrics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ME 0051 or MEMS 0051 or MET 1110 or BIOENG 1210; PROG: School of Engineering

MEMS 1052 - HEAT AND MASS TRANSFER

Minimum Credits: 3
Maximum Credits: 3
One- and two-dimensional steady and unsteady heat conduction; internal and external forced convection; free convection; engineering principle of radiation; heat exchangers and special topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ME 0051 or MEMS 0051 or MEMS 0048 or BIOENG 1210 or MET 1110; PROG: School of Engineering

MEMS 1053 - STRUCTURE OF CRYSTALS AND DIFFRACTION

Minimum Credits: 3
Maximum Credits: 3
Crystallography of materials; Bravais lattices, crystal systems, and crystal structures. Diffraction methods; x-ray, electron, and neutron scattering; atomic scattering factor; structure factor; powder techniques; Laue method; reciprocal lattice; electron diffraction; amorphous materials; thermodynamics of crystals and crystal defects; polymorphism; order-disorder phenomena.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0022 or MET 1162); LVL: Jr or Sr; PROG: Swanson School of Engineering

MEMS 1055 - COMPUTER AIDED ANALYSIS IN TRANSPORT PHENOMENA

Minimum Credits: 3
Maximum Credits: 3
An introduction to some of the numerical/computational methods for solving problems in transport phenomena.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: [ENGR 0712 or 0715 or 0718 or (ET 0023 and 0030)] and (ME 0051 or MEMS 0051 or MET 1110 or BIOENG 1210) and MATH 0290 and MEMS 0071 and (ENGR 0012 or ENGR 0016); PROG: School of Engineering

MEMS 1057 - MICRO/NANO MANUFACTURING

Minimum Credits: 3
Maximum Credits: 3
Explores different micro/nano manufacturing options, material choices, and a variety of applications. The goal is to gain an understanding of various micro/nano fabrication techniques, learn major applications and principles of micro/nano systems, and develop an ability to design and fabricate new micro/nano systems.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

MEMS 1058 - ELECTROMAGNETIC PROPERTIES OF MATERIALS

Minimum Credits: 3
Maximum Credits: 3
Review of basic principles: quantum theory, band and zone theory. Transport, electrical, and thermal properties; semiconductors and semiconductor devices; magnetic materials, hard and soft; dielectric and optical properties.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0022 or MET 1162; PROG: School of Engineering

MEMS 1059 - PHASE EQUILIBRIA IN MULTI-COMPONENT MATERIALS

Minimum Credits: 3
Maximum Credits: 3
Thermodynamics of solutions with applications to materials systems; heterogeneous phase equilibria; relations between free energy and phase diagrams, electrochemistry; rate processes; thermodynamics of surfaces.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0022 or MET 1162) and (ME 0051 or MEMS 0051 or MET 1110 or MEMS 0048 or BIOENG 1210); LVL: Jr or Sr; PROG: Swanson School of Engineering

MEMS 1060 - NUMERICAL METHODS

Minimum Credits: 3
Maximum Credits: 3
Introduction to numerical techniques for the solution of linear and nonlinear equations, numerical integration and differentiation, interpolation, ordinary and partial differential equations, and eigenvalue problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

MEMS 1063 - PHASE TRANSFORMATION AND MICROSTRUCTURE EVOLUTION

Minimum Credits: 3
Maximum Credits: 3
Phase equilibria; binary and ternary system; phase rule; thermodynamics and phase diagrams; diffusion in materials; phase transformations; nucleation and growth kinetics; precipitation reactions; solidification; glass-forming systems; phase separation; displacive or martensitic transformations; microstructural development in metallic and non-metallic systems; electron theory of solids; zone theory; electrical and magnetic properties of materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 1053 and MEMS 1059; LVL: Jr or Sr; PROG: Swanson School of Engineering (UENGR)

MEMS 1065 - THERMAL SYSTEMS DESIGN

Minimum Credits: 3
Maximum Credits: 3
Design, analysis, and optimization of thermal systems. Systems analysis applied to heat exchanger, power conversion, air conditioning, refrigeration, and heat recovery systems. Economics, equation fitting, and thermal property evaluation is integrated into the simulation and optimization of thermal system designs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 1051 and 1052 and 0071; PROG: School of Engineering

MEMS 1070 - MECHANICAL BEHAVIOR OF MATERIALS

Minimum Credits: 3
Maximum Credits: 3
Theory of elasticity, stress, strain, constitutive equations, isotropic and anisotropic elasticity, wave propagation in brittle solids, time dependent deformation, viscoelasticity, vibrations, damping, anelasticity, creep, design of creep resistant microstructures, deformation of polymers, physics of fracture, fracture mechanisms, brittle fracture, ductile fracture, design of fracture-resistant microstructures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: (ENGR 0022 or MET 1162) and (ENGR 0141 or ENGR 0145 or ET 0053); PROG:

MEMS 1071 - APPLIED FLUID MECHANICS

Minimum Credits: 3
Maximum Credits: 3
Basic principles of computational fluid dynamics (CFD). Hands-on experience using a commercial CFD package. Students will us this tool to solve a design problem. External flows with particular emphasis on aerodynamics. Fluid machinery. Experimental fluid mechanics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 0071 or 1072; PROG: Swanson School of Engineering

MEMS 1079 - SENIOR MATERIALS RESEARCH PROJECT

Minimum Credits: 3
Maximum Credits: 3
A major project involving literature search, planning, experimentation, analysis, an oral presentation, and a final technical report. The project is either sponsored by the department or a local company and is conducted by an individual or a small team of students with a faculty adviser.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

MEMS 1080 - POWDER PROCESSING OF MATERIALS

Minimum Credits: 3
Maximum Credits: 3
Powder processing is widely practiced in the traditional powder metals and ceramics industries as well as in additive manufacturing. This course will review these applications and focus on the underlying materials science and engineering employed in: production of metals and ceramic powders, powder characterization methods, the forming methods used to make shapes from metal and ceramic powders as well as sintering and heat treatment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MEMS 1081 - SMART MANUFACTURING - KEY TO INNOVATIONS

Minimum Credits: 3
Maximum Credits: 3
This course covers a range of topics centered on "smart manufacturing", which is a key to provide novel products and solutions for critical industries and special situations. These topics include additive manufacturing, manufacturing metrology, quality control, cyber-physical manufacturing system, supply chain, and artificial intelligence. Fundamental concepts and hands-on practice in smart manufacturing will be demonstrated through lectures, assignments and projects. A background in dynamic systems, mechanical design and measurements is expected button required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MEMS 1082 - ELECTROMECHANICAL SENSORS AND ACTUATORS

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to provide a thorough understanding of the various mechanisms that can be exploited in the design of

electromechanically sensors and actuators. These transduction mechanisms include: 1) transduction based on changes; in the energy stored in the electric field, 2) in the energy stored in the magnetic field, 3) piezoelectricity and pyroelectricity, 4) linear inductive transduction mechanisms, and 5) resistive transduction mechanisms. Will discuss various transduction materials, sensors and actuators from a wide range of applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

MEMS 1083 - ROBOT MODELING AND CONTROL

Minimum Credits: 3
Maximum Credits: 3
This course introduces the fundamentals of robot modeling and control. The course will cover forward and inverse kinematics, Jacobians, Lagrangian dynamics, motion planning, robust and adaptive motion and force control. The course will provide relevant applications from industrial robotics, mobile robotics, and human robotics and interaction. The course will be mathematically rigorous and requires knowledge of linear algebra, dynamic systems, and automatic control. Background material on these topics will be reviewed in the class The course is appropriate for undergraduate and graduate students from electrical engineering, mechanical engineering, computer science, and mathematics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 1014 and MATH 0280; PROG: Swanson School of Engineering

MEMS 1085 - DEPARTMENTAL SEMINAR

Minimum Credits: 0
Maximum Credits: 0
Seminars are designed to acquaint the student with aspects of engineering not normally encountered in classes and include a wide range of topics such as the significance of engineering as a profession and the relation of engineering to current social problems.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis
Course Requirements: PROG: Swanson School of Engineering

MEMS 1087 - SUSTAINABLE MATERIALS PRODUCTION

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the use of global resources in the production of the most heavily consumed materials in manufacturing and construction. For each of these materials the production process will be described starting with the resources from which they are derived and ending with the needs of the manufacturing or construction process in which they are used. The material life cycle and materials eco-selection criteria will be used to highlight end-of-life issues and how the sustainability of materials production may be improved. The use of strategic minerals in materials production will also be highlighted. Finally, renewable materials will be introduced and the prospects for their widespread use in materials production considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Prerequisites: ENGR 0022 or MSE 2067

MEMS 1097 - SPECIAL PROJECTS

Minimum Credits: 1
Maximum Credits: 3
Investigation and research embodying testing, original design, or research on an approved subject; or an individual course of study guided by an approved departmental faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

MEMS 1098 - SPECIAL PROJECTS II

Minimum Credits: 1
Maximum Credits: 3

Investigation and research embodying testing, original design, or research on an approved subject; or an individual course of study guided by an approved departmental faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

MEMS 1101 - FERROUS PHYSICAL METALLURGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (ENGR 0022 or MET 1162) and (ME 0051 or MEMS 0051 or BIOENG 1210 or MET 1110) and MEMS 1010; PROG: Undergraduate Engineering

MEMS 1102 - PRINCIPLES AND APPLICATIONS OF STEEL ALLOY DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course will present the students with a discussion of the properties that are required of engineering alloys for a given commercial application. The alloy design, thermomechanical processing and required package of mechanical properties for plate, strip, bar, rod, wire and tubular products will be reviewed. These include: strenth, toughness, formability, weldability, fatigue resistance and corrosion/oxidation resistance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 1101; PROG: Swanson School of Engineering

MEMS 1103 - PRINCIPLES AND APPLICATIONS OF STEEL PROCESSING AND DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course will present case studies of actual components used in commercial applications in the automotive, construction, oil and gas, and nuclear industries. This course will guide the student from the alloy selection, microstructural processing, and mechanical properties to the final fabrication steps.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 1102; PROG: Swanson School of Engineering

MEMS 1111 - MATERIALS FOR ENERGY GENERATION AND STORAGE

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to provide an overview of the important renewable energy resources and the modern technologies to harness and store them. After taking MEMS 1111, students are expected to develop a solid scientific and technological understanding of new alternative energy technologies. This course will give an overview on harnessing renewable energy resources and storing collected energy. In each topic, issues relevant to basic principles and technological barriers limiting the use of non-fossil energy will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

MEMS 1120 - APPLIED ENGINEERING SIMULATION IN DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the development of critical thinking skills tailored to engineering simulation in mechanical design. Commonly used computational simulation tools including finite element analysis and computational fluid dynamics will be highlighted. Students will examine the role of simulation in product design and learn to recognize opportunities to integrate simulation-based analysis into traditional engineering analysis and design workflows. A term-long project will offer exposure to simulation tools and provide students the context to practice their skills in a complex design environment. Students are required to take the one-credit course MEMS 1121 Simulation Workshop concurrently.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 0051 and 0071 and 1028

MEMS 1121 - APPLIED ENGINEERING SIMULATION IN DESIGN

Minimum Credits: 1
Maximum Credits: 1
Provide an environment for hands-on learning of simulation software an an opportunity to interact with the simulation student community. Provide a mechanism for the discussion of special topics and for guest speakers. Develop practical simulation software skills.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0145 and MEMS 0051; CREQ: MEMS 1120

MEMS 1163 - CERAMIC MATERIALS

Minimum Credits: 3
Maximum Credits: 3
Structure of ceramics and glasses. Microstructures and their development. Properties, processing, and applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0022; PROG: Undergraduate School of Engineering

MEMS 1174 - CERAMIC PROCESSING

Minimum Credits: 3
Maximum Credits: 3
The course is focused on powder processing of ceramic materials. It is arranged according to the steps in processing, statiing with powder synthesis and characterization, proceeding through the commonly used powder forming methods and finally to the high temperature sintering of the product.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENGR 0022, MSE 1163 or MEMS 1163; PROG: School of Engineering

MEMS 1256 - APPLIED COMPUTATIONAL HEAT AND MASS TRANSFER

Minimum Credits: 3
Maximum Credits: 3
Introduction to the implementation of commercial and open-source computational fluid dynamics (CFD) software to solve complex, multi-physics, multi-scale engineering problems. Topics covered include mesh generation, discretization and input uncertainty, model selection for internal and external laminar and turbulent flow, conjugate heat transfer, multi-phase flow, uncertainty quantification, and high-performance/supercomputing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MEMS 0071; PROG: Swanson School of Engineering

Medieval & Renaissance Studies

MRST 1002 - INTRODUCTION TO THE RENAISSANCE

Minimum Credits: 3
Maximum Credits: 3
The idea of the Renaissance is central to Western culture. Many of our values and tastes devolve from--or consciously react against--patterns that were established or reinterpreted five hundred years ago. The student who explores the renaissance, therefore, gains hold of one of the keys of Western civilization. He or she also acquires practice in critical reading, discussion, and the written expression of ideas.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies, Writing Requirement Course

Microbiology

ORBIOL 1020 - PRINCIPLES OF MICROBIOLOGY

Minimum Credits: 4
Maximum Credits: 4
An introductory course in microbiology for dental hygiene students with no previous background in microbiology. Major areas included are microorganisms, immune mechanisms of the host and the interaction of the host and the microorganisms in disease and homeostasis. Major emphasis is placed on diseases with oral manifestations and infection control in dental medicine. The laboratory component is devoted to microbiological methods, infection control and oral ecology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

ORBIOL 1025 - INTRODUCTION TO MICROBIOLOGY

Minimum Credits: 3
Maximum Credits: 3
An overview of medical microbiology introduces the student to medically important bacteria, fungi, viruses, parasites and to immunity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

ORBIOL 1900 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

Modern Greek

GREEKM 0101 - GREEK (MODERN) 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies, Transatlantic Studies, West European Studies

GREEKM 0102 - GREEK (MODERN) 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0231 or GREEKM 0101; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies, Transatlantic Studies, West European Studies

GREEKM 0103 - GREEK (MODERN) 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting are cognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0232 or GREEKM 0102; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies, Transatlantic Studies, West European Studies

GREEKM 0104 - GREEK (MODERN) 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0233 or GREEKM 0103; MIN GRADE: 'C'
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies, Transatlantic Studies, West European Studies

GREEKM 0105 - GREEK (MODERN) 5

Minimum Credits: 3
Maximum Credits: 3
Third-year Modern Greek builds on skills acquired in first and second year Greek. It is a thematic exploration of Greek culture at the advanced intermediate level. Through a combination of movies, songs, poems and newspapers, it exposes students to aspects of traditional and pop Greek culture as well as to important current issues. By the end of this course students should be able to: talk about ecology and the environment; discuss "rembetica" songs within their social context; look for a job, write a CV, prepare for an interview; and, understand the history of the Greek language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0234 or GREEKM 0104; MIN GRADE 'C' FOR ALL LISTED COURSES
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies, Transatlantic Studies, West European Studies

GREEKM 0106 - GREEK (MODERN) 6

Minimum Credits: 3
Maximum Credits: 3
This course continues the thematic exploration of Greek culture at the advanced intermediate level. By the end of this year, students will be able to participate in most conversations employing common idiomatic language and express opinion and arguments with clarity and fluency. By the end of this course students should be able to: talk about the history of the Akropolis and the Olympic Games; discuss the achievements of the Byzantine Empire; employ useful banking and economic terminology; understand the Greek polity and the language of the Press; and engage with Modern Greek literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: GREEKM 0105; MIN GRADE 'C'
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies, Transatlantic Studies, West European Studies

GREEKM 1615 - THE GREEKS: JOURNEY THROUGH CULTURE

Minimum Credits: 3
Maximum Credits: 3
What makes Greek culture appear both familiar and distinct? What are some of the root metaphors through which contemporary Greeks make sense of the world? How do Greeks approach their history and their future today? These are some of the questions that will inform our exploration of Greek culture and society in this course. Focusing on both history and social context, this course will introduce students to issues such as language and identity, continuity and social change, food and memory, narrative and metaphor, heroes and symbols, performance and ritual, crisis and transformation. It will expose students to the complexity and richness of experience and cultural expression in the Greek world and provide them with the tools to better analyze, understand and appreciate both the Greek as well as their own cultural practices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement

GREEKM 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

GREEKM 1905 - UNDERGRADUATE TEACHING ASSISTANT IN MODERN GREEK

Minimum Credits: 1
Maximum Credits: 3
Undergraduate Teaching Asisstant for Modern Greek Language Class
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

GREEKM 1909 - SPECIAL TOPICS IN MODERN GREEK

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Music

MUSIC 0100 - FUNDAMENTALS OF WESTERN MUSIC

Minimum Credits: 3
Maximum Credits: 3
This class provides a comprehensive introduction to reading and understanding tonal music. It is intended for music majors preparing to enter the music theory sequence, or for non-majors who wish to learn to better understand and produce musical notation. Topics include pitch, rhythm and meter, scales, intervals, chords, and harmony. By the end of this semester, you will be able to identify basic harmonic progressions and musical forms both visually and aurally. Prior experience with music theory is neither required nor assumed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 0111 - EXPERIENCING MUSIC HISTORY IN PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

MUSIC 0115 - THE ALEXANDER TECHNIQUE

Minimum Credits: 1
Maximum Credits: 1
An elective, this course teaches musicians, actors, and other kinetic performers how posture and body awareness impact their health. Students will learn how to take conscious control of their movements during activities so their performances will be fluid, natural, poised and expressive to their fullest potential. The course will improve the quality of performance, daily routines, and study habit positions, and prevent repetitive movement through conscious release of the muscles in the upper body.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MUSIC 0121 - BASIC MUSICIANSHIP: CLASS PIANO

Minimum Credits: 3
Maximum Credits: 3
This course in basic musicianship provides non-music majors with keyboard skills while introducing them to basics of music theory. Course content includes scales, intervals, chords, and simple analysis. The course prepares students to transpose and sight read. Students will also be expected to take melodic dictation. Electronic pianos are used in class and are available for daily practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0122 - BASIC MUSICIANSHIP: CLASS GUITAR

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide non-music majors with an introduction to the techniques of classical, folk, rock, and jazz guitar. While the emphasis is on playing skills, the course also introduces many aspects of music theory and notation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 0123 - BASIC MUSICIANSHIP: CLASS VOICE

Minimum Credits: 3
Maximum Credits: 3
This course is designed for non-voice majors who want to develop their singing and sight-reading skills. It provides an introduction to posture, breathing, tone production, diction, and interpretation, while introducing students to the elements of music theory and notation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 0124 - INTERMEDIATE PIANO

Minimum Credits: 3
Maximum Credits: 3
This course is designed for students who have previously studied the piano. Throughout the semester, you will set individual goals with your instructor and work toward meeting those goals. The class will include preparation for and performance in two recitals, where students will present polished performances of appropriately challenging pieces (one ensemble and one solo). Alongside these performance objectives, students will also undertake a study of musical form, developing large-scale listening and analysis skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 0211 - INTRODUCTION TO WESTERN ART MUSIC

Minimum Credits: 3
Maximum Credits: 3
This class will examine the history, culture, and practice of '"classical"' music. We will explore the technical workings of music and learn what to listen for in a wide variety of musical styles. We will also discuss the values and meanings of music in different social and political contexts. No prior knowledge of music is necessary and there is no requirement to read music to succeed in the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

MUSIC 0216 - GLOBAL MUSIC HISTORY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MUSIC 0222 - HISTORY OF WESTERN MUSIC TO 1750

Minimum Credits: 3
Maximum Credits: 3
A study of selected master works or Western art music in a historical context from Gregorian chant through Johann Sebastian Bach. Emphasis is on musical understanding through critical listening, score study, and lectures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies, West European Studies

MUSIC 0224 - HISTORY OF WEST MUSIC SINCE 1750

Minimum Credits: 3
Maximum Credits: 3
This course traces the history of musical style from the late eighteenth century to the present, through a close study of representative works, in the context of leading artistic and intellectual trends.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0411
Course Attributes: Global Studies, West European Studies

MUSIC 0234 - HISTORY OF THE SYMPHONY

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the development of the symphony from its origins to the present. Students study individual symphonic compositions from both historical and analytical viewpoints. Topics covered include changes in instrumentation, harmony, formal design, as well as the changing place of the genre in concert life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 0311 - INTRODUCTION TO WORLD MUSIC

Minimum Credits: 3
Maximum Credits: 3
This introductory course deals with a great variety of traditional musical genres from selected cultures around the world. It aims to familiarize students with music sound and music structure of different people, to help them appreciate music in its cultural context, and to give them a broad worldview of music both as a human activity with social functions and as an artistic expression. Generous use will be made of audio-visual aids and live performances in the presentation of materials.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 0375 - INTRODUCTION TO OPERA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 0411 - THEORY 1

Minimum Credits: 3
Maximum Credits: 3
This course introduces the principles and practice of diatonic harmony and voice leading, through a study of works by leading composers of the 18th and 19th centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0100(MIN GRADE: B-) or Music Theory Score equal/greater 13

MUSIC 0412 - MUSICIANSHIP 1

Minimum Credits: 1
Maximum Credits: 1
This course provides a disciplined environment in which to develop or improve audiation and aural skills, including sight-singing (moveable 'Do' solfeggio) in major and minor keys, interval recognition exercises, recognition of triads in inversions and with added tones, and melodic and rhythmic dictation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0100 (Min Grade B-) or Music Theory Score equal/greater than 13

MUSIC 0415 - THEORY 2

Minimum Credits: 3
Maximum Credits: 3
This course introduces the principles and practice of diatonic harmony and voice leading, through a study of works by leading composers of the 18th and 19th centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0411
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 0416 - MUSICIANSHIP 2

Minimum Credits: 1
Maximum Credits: 1
This course is the sequel to MUSIC 0412 and continues to develop and improve audiation and aural skills, including sight-singing (moveable 'Do' solfeggio) in major and minor keys; recognition of chord progressions, cadences, and non-harmonic tones; melodic, rhythmic, and harmonic dictation in multiple voices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0412; MIN GRADE: C

MUSIC 0417 - THEORY 3

Minimum Credits: 3
Maximum Credits: 3
This course introduces the principles and practice of chromatic harmony and voice leading, through a study of works by leading composers of the 18th and 19th centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0411

MUSIC 0419 - THEORY 4

Minimum Credits: 3
Maximum Credits: 3
The emphasis of this course will be the analysis of contemporary music from around the world. A member of the composition/theory faculty will teach the course. In addition, ethnomusicology faculty will lead class sessions on a variety of conceptual approaches to music-making and the organization of sound throughout the world. This approach to music theory aims to benefit from the knowledge and experience of the broader music faculty. The first half of the semester will focus on developing the analytic techniques necessary for a careful investigation of a particular musical component (melody, rhythm, harmony, form, and so on). In the second half of the semester, students will focus on close analyses of particular pieces of music, with attention to the cultural context and aesthetic values that define individual works.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0411
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 0510 - VOICE-JAZZ

Minimum Credits: 1
Maximum Credits: 1
This course is designed to teach jazz vocal style and improvisation in an individualized setting. Students will learn the basics of jazz voice production through technical exercises at the keyboard. Jazz terminology will be introduced and students will internalize jazz rhythms and articulations. The course provides for active listening with an emphasis on sight singing and ear training. Students will explore scale pattern and modes as elements of improvisation. They will express such technique through call-and-response and the embellishment of standard jazz tunes. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0510
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0511 - VOICE

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in vocal techniques and literature. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0511
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0512 - PIANO

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the piano. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies

Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0512
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0513 - ORGAN

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the organ. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0513
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0515 - VIOLIN

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the violin. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0516 - VIOLA

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the viola. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0517 - VIOLONCELLO

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the violoncello. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0517
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0518 - DOUBLE BASS / BASS GUITAR

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the double bass. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

Course Requirements: PREQ: MUSIC 0518
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0519 - FLUTE

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the flute. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0519
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0520 - OBOE

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the oboe. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0520
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0521 - CLARINET

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the clarinet. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0521
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0522 - SAXOPHONE

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the saxophone. Students receive instruction in both jazz and classical techniques. One hour private lesson per week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0522
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0523 - FRENCH HORN

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the French horn. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies

Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0523
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0524 - TRUMPET

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the trumpet. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0524
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0525 - BASSOON

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the bassoon. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0525
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0526 - TROMBONE

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the trombone. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0526
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0527 - PERCUSSION

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of percussion. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0527
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0528 - JAZZ-STUDIO SET DRUMMING

Minimum Credits: 1
Maximum Credits: 1
Course will consist of the following styles of music technique for students to become qualified professionals in the entertainment industry. The music styles for the course will be: jazz, pop, big band, and recording session technique. These styles will also be enhanced with training in ear development, sight reading, and improvisational class demonstrations. Dietrich School students must complete three credits in performance courses

to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0528
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0529 - GUITAR

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the guitar. Students receive a one hour private lesson each week. May be repeated for additional credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0530 - JAZZ GUITAR

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of the jazz guitar. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 0530
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0533 - JAZZ PIANO

Minimum Credits: 1
Maximum Credits: 1
This course is designed to teach jazz piano and improvisation in an individualized setting. Students will learn the basics of jazz piano through technical exercises at the keyboard. Students will explore scale pattern and modes as elements of improvisation. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0533
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0540 - NON-WESTERN INSTRUMENTS

Minimum Credits: 1
Maximum Credits: 1
This course provides instruction in the techniques and literature of non-Western instruments. Students receive a one hour private lesson each week. May be repeated for credit. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0609 - GOSPEL CHOIR

Minimum Credits: 1
Maximum Credits: 1
Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.

Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0611 - COLLEGIATE CHORALE

Minimum Credits: 1
Maximum Credits: 1
Open to students, faculty, staff, and community. The study and performance of traditional and contemporary choral works.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

MUSIC 0612 - HEINZ CHAPEL CHOIR

Minimum Credits: 1
Maximum Credits: 1
An acapella choir singing a wide range of choral music. Regular performances on campus and on annual tour. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0612
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0613 - UNIVERSITY GLEE CLUB

Minimum Credits: 1
Maximum Credits: 1
An ensemble of men's voices that performs on campus and on tour. Repertoire ranges from traditional glee club numbers, through broadway hits, to works from the classical literature. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0613
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0614 - WOMEN'S CHORALE

Minimum Credits: 1
Maximum Credits: 1
Performs treble choral music from the 16th century to today. Members receive instruction in vocal technique and sight singing skills. Emphasis is given to diction and stage presence. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0614
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0615 - CARPATHIAN MUSIC ENSEMBLE

Minimum Credits: 1
Maximum Credits: 1
The ensemble introduces students to Hungarian, Slovak, Romanian, Polish, Ukrainian, Gypsy, and Jewish musical traditions. Through weekly rehearsals, students learn musical styles, improvisation techniques, and performance practices with regard to diverse yet mutually interconnected music genres. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Directed Studies

Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement, Russian & East European Studies

MUSIC 0616 - BLUEGRASS ENSEMBLE

Minimum Credits: 1
Maximum Credits: 1
Bluegrass, a form of American roots music, is an Appalachian-based genre that draws on immigrant traditions, blues, gospel, and folk. Once associated primarily with poorer whites, it has been reclaimed by numerous musicians who have popularized it as a global genre. The popularity of bluegrass in Western Pennsylvania is, in part, a result of the broadening market of audiences and musicians. Pittsburgh's local embrace of bluegrass, however, can be understood, as an integral aspect of the city's refashioning. The Bluegrass Ensemble seeks to augment the University of Pittsburgh world music ensemble program through an emphasis on local music traditions. The ensemble will draw from students who have some experience with bluegrass instruments, including violin (fiddle), guitar, mandolin, banjo, and dobro. The ensemble will perform as a group on campus and will make connections with the folk music revival scenes in Pittsburgh.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

MUSIC 0620 - UNIVERSITY ORCHESTRA

Minimum Credits: 1
Maximum Credits: 1
Open to students, faculty, staff, and community musicians. The orchestra performs a wide variety of works from the standard repertoire, along with contemporary compositions. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0620
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0630 - MARCHING BAND

Minimum Credits: 1
Maximum Credits: 1
The band performs at athletic events and in concert. Membership is by audition. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0630
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0631 - CONCERT BAND

Minimum Credits: 1
Maximum Credits: 1
The concert band prepares and performs music from the band repertoire. Membership is by audition. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0631
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0640 - JAZZ ENSEMBLE

Minimum Credits: 1
Maximum Credits: 1
Big band jazz performances and rehearsal techniques. Performances include festivals, concerts, and tours. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0640
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0660 - AFRICAN DRUMMING ENSEMBLE

Minimum Credits: 1
Maximum Credits: 1
The ensemble focuses on the drumming techniques of selected African society, the ensemble performs in collaboration with the Afro-American dance class and the Oakland dance school, and various local schools. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Creative Work General Ed. Requirement

MUSIC 0661 - THE PITT AFROPOP ENSEMBLE

Minimum Credits: 1
Maximum Credits: 1
In this course, students will learn how to perform and compose popular music styles that originated from or have a cultural connection to Africa. Through performance, the course exposes the interconnections between African music and the music of the African diaspora such as reggae and jazz.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MUSIC 0672 - CHAMBER MUSIC

Minimum Credits: 1
Maximum Credits: 1
Students may elect chamber music to study any approved repertoire involving more than one instrument or voice. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 0673 - SMALL JAZZ ENSEMBLES

Minimum Credits: 3
Maximum Credits: 3
In this course, students will familiarize themselves with notable standard jazz songs and play them in small ensembles. Students will learn melodies and chord progressions of the assigned songs and improvise on them. In addition, basic jazz theory and performance conventions will be discussed. Furthermore, students are encouraged to write their original compositions. There will be midterm and final juries as well as a public concert at the end of the semester.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement

MUSIC 0690 - UNIVERSITY GAMELAN

Minimum Credits: 1
Maximum Credits: 1
A gamelan is a set of mostly percussive instruments featuring tuned bronze gongs, bronze-keyed instruments, and drums. In the beginning ensemble, students will learn how to perform simple compositions on several instruments as well as the basic organizing principles of javanese traditional music. The advanced ensemble is made up of students invited to join after at least one semester of beginning gamelan. Students in the advanced group will learn more complex instruments and pieces. The ensemble will also perform publically at least once every year. Dietrich School students must complete three credits in performance courses to meet the Creative Work General Education Requirement.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Creative Work General Ed. Requirement

MUSIC 0711 - HISTORY OF JAZZ

Minimum Credits: 3
Maximum Credits: 3
The course focuses on the chronological development of jazz from its beginnings on the plantation to its present state as a world concert music. Various styles such as ragtime, blues, gospel, spirituals, rhythm and blues, rock, soul, etc., Are examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

MUSIC 0844 - THE MUSIC OF THE BEATLES

Minimum Credits: 3
Maximum Credits: 3
This course combines a study of the cultural context in which The Beatles worked with a consideration of how the music was created and evolved over time. Topics include the band's formative influences, relationships to contemporary artists, and evolution from live performing band to studio recording artists. Broader contextual themes include the rise of "teenage culture", Beatlemania as a phenomenon most closely associated with young female fans, and the band's relationship to the "youth counterculture".
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

MUSIC 0847 - THE MUSIC OF LED ZEPPELIN

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the life and music of the band Led Zeppelin and the social and cultural conditions of the 1970s. Recipients of a Kennedy Center Honor for "lifetime contributions to American culture through the performing arts," Led Zeppelin is widely considered to be one of the most innovative, successful, and influential bands in the history of rock music. We will consider the band's formative influences; stylistic cross-influences with contemporary artists; and the song-writing and musical styles of individual band members. In this course, the band serves as a lightening rod for analyzing social issues of musical appropriation and race; gender and sexuality; Orientalism; and cultural rights and copyrights. We will pay close attention to the band's repertoire of songs (87 in all), which are astonishing for their variety and innovation. As progenitors of heavy metal, the course will assess the influence of Led Zeppelin during the last fifty years, and their place in the history of rock music. By the end of the semester, students will submit a paper that embraces critical thinking about music from analytical, historical, cultural, and multi-disciplinary perspectives. There are no prerequisites for this course; everyone is welcome. This course does not overlap with other courses in the Department of Music.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 0854 - HEAVY METAL MUSIC

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 0896 - MUSIC AND FILM

Minimum Credits: 3
Maximum Credits: 3
This introductory course, designed for non-majors with no previous background in music or film studies, examines music within the context of film, instructing students how to listen and think critically about the music and its relationship to the moving image and narrative.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1224 - LATER RENAISSANCE AND BAROQUE MUSIC

Minimum Credits: 3
Maximum Credits: 3
Starting with the new attitudes towards word-tone relationships that can be seen in the music of Josquin, and with the rise of idiomatic instrumental music, the course will trace those trends, among others through the music of such composers as Josquin, Willaert, Rore, Lassus, Monteverdi, Corelli, Vivaldi, Handel, and J.S. Bach.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: West European Studies, Writing Intensive Course (WRIT)

MUSIC 1226 - CLASSICAL AND EARLY ROMANTIC MUSIC

Minimum Credits: 3
Maximum Credits: 3
The course will begin a few decades before 1750, tracing the new stylistic trends that grew up in Italy and France during Bach's lifetime, and will continue through Mozart, Haydn, and Beethoven to the composers of the early nineteenth century who still composed within the classical aesthetic, e.g. Schubert, Schumann, and Mendelssohn.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*

MUSIC 1228 - LATE ROMANTIC AND EARLY 20TH CENTURY MUSIC

Minimum Credits: 3
Maximum Credits: 3
This course will begin with the more revolutionary nineteenth-century composers who worked in Paris--Chopin, Berlioz, Liszt--and trace the breakdown of tonality and the emergence of new styles and structural principles in the late nineteenth and twentieth centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Russian & East European Studies, West European Studies, Writing Requirement Course

MUSIC 1230 - MUSIC SINCE 1945

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to Western art music created since 1945.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1242 - MAJOR COMPOSER

Minimum Credits: 3
Maximum Credits: 3
This course examines the life and works of a major figure in Western art music. The content of the course changes, but it emphasizes music in its historical and cultural contexts, as well as individual genres and styles.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0411 and 0415

MUSIC 1253 - LISTENING TO LIVE MUSIC PERFORMANCE

Minimum Credits: 3
Maximum Credits: 3
Listening to Live Music Performance is a course that hopes to deepen the way you understand music and, through new understanding, inspire the way you experience music! Over the course of the semester, we will explore, without prejudice, a variety of live music performances that will help you develop a lifelong ability to analyze music performance, think critically about the act of listening to music, and to consider your critical role as a member of the audience. The purpose of this class is to transform your experience with music by focusing on live performance. Music is a ubiquitous part of our everyday lives, so much so that many people have lost the ability to listen critically to what they are hearing. In many contexts, we are not even aware that music is playing until it is brought to our attention! Recorded music accounts for much of this ubiquity and it's also changed many listeners' relationship with music. Throughout the semester, we will explore the experience of listening to live performances of music, which may include large ensembles, chamber ensembles, solo concerts, and multi-media performances. Topics will include protocol and traditions of the audience, criteria for critical listening, and discrimination of basic elements of performance. Students will attend live performances, consider evaluative criteria for music performances, and develop critical listening skills. We will also have opportunities to speak with performers to learn about various ways of experiencing music. We are interested in developing critical skills to experience, analyze, and appreciate the myriad musical styles and contexts you will encounter over a lifetime of listening. To that end, this class is focused totally on the act of critical, experiential listening, how to do it, informed listening, and what it can tell the listener's not only about a piece of music, but about the culture and society that created that music, as well as the challenges faced by the increasing ubiquity of music in our world. You do not need a musical background to have a successful semester. Through listening, reading, and associated assignments, the objective is to deepen your experience of music.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1262 - CRITICAL LISTENING AND MUSIC CRITICISM

Minimum Credits: 3
Maximum Credits: 3
This course applies journalistic music criticism to develop critical listening skills crucial to learning about and performing classical and other music. In writing assignments and in class discussion, students will critique concerts and recordings, then defend their opinions with factual evidence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

MUSIC 1270 - MUSIC, CULTURE & TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
Students will engage with major social, historical, and cultural issues affecting music technology in the West from the phonograph in the 19th century to the iPhone in the 21st.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

MUSIC 1271 - THE SOUNDS OF ROMANTIC COMEDY

Minimum Credits: 3
Maximum Credits: 3
Sometime between Ernst Lubitsch's The Shop Around the Corner (1940) and Nora Ephron's You've Got Mail (1998), romance changed in the United States. Where class and wealth used to be deciding factors for romantic love, there now emerged the concept of the soulmate, who could be anyone. In this course, we will watch American romantic comedies of the last 100 years, paying particular attention to how the development of the soundtrack has changed what love sounds and feels like.Students will develop skills in closely analyzing sound and image in film, critically interpreting popular culture in relation to broader events in society, and thinking about the relation between music, identity, and politics. In particular, we will together develop answers to the following questions: how did capitalism, social justice movements, the changing nature of work, and other cultural transformations affect what people expected from intimate union? What aesthetic norms for representing romance changed alongside cultural norms?

How is the narrative of love inflected by race, gender, ethnicity, sexuality, religious difference, ability difference, and/or economic disparity?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1273 - JAZZ AND FILM

Minimum Credits: 3
Maximum Credits: 3
Ralph Ellison, the author of the American classic Invisible Man, asserted that all of American life was "jazz-shaped." By this he meant that jazz (and blues) were more than music, that jazz (and blues) had ubiquitously infiltrated American life, and that it served as a model for an expanding pluralist culture. Jazz and Film explores this notion in three areas: in representations of jazz culture on film, in the sonic presence of jazz in film, and the influence of jazz on filmmaking. Students will give weekly responses to readings, films, or recordings, and will write a research paper on a topic of their own choosing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1280 - MUSIC, ARTS, AND CONFLICT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

MUSIC 1306 - MUSIC AND DISABILITY STUDIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MUSIC 1307 - MUSIC AND SPORTS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

MUSIC 1308 - CULTURAL POLITICS OF SOUL

Minimum Credits: 3
Maximum Credits: 3
This is an introductory level course which examines soul music as a lived cultural practice, an artistic genre, a transnational phenomenon, and an important historical site for the articulation of gender, race and class in both American popular culture and the African diaspora. Special attention is placed on the transitions and parallels of "soul" as a musical genre, with "soul" as a marker of cultural politics and identity. As a musical genre, "soul" was first recognized as the secular reinvention of the Southern, gospel tradition, acting as a soundtrack to the Civil Rights Movement. Once the Black community merged this music with the ideals of Black radical politics, it transformed the popular genre into an urban practice of "Soul Power," which then acted as a soundtrack to the Black Power Movement. Positioning music within a broader context of postcolonial, technological, and transnational development, this course analyzes the rich intersections of music, culture, and politics as it exists in soul music as well as the entire media apparatus, including independent and corporate record labels, African American print media, and radio, television and film, that gave rise to the soul music industry. There are no prerequisites for this course, nor do students need to have any formal training in music or need to know how to read western music notation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1310 - GLOBAL AND POPULAR MUSIC

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to theories and research methodologies in global and popular music, including but not limited to musical and textual transcription, fieldwork and methods for relating social behavior to musical behavior.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Global Issues General Ed. Requirement

MUSIC 1312 - GLOBAL MUSIC INDUSTRIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MUSIC 1320 - AMERICAN MUSIC

Minimum Credits: 3
Maximum Credits: 3
The course will focus on the major genres crucial to the understanding of music in American life, both written and unwritten as well as popular, vernacular and classical. Special attention will be given to the results of acculturation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1321 - MUSIC, GENDER AND SEXUALITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1326 - AFRICAN-AMERICAN MUSIC IN U.S.

Minimum Credits: 3
Maximum Credits: 3
This course is designed to familiarize the student with various phases of African-American music existing in North America; blues, gospel-spirituals, work songs, children's games songs, and classical compositions of ragtime composers Scott Jobin, J.P. Johnson, etc. Students will conduct field projects centered around "street recordings, locations, interviews of local and visiting artists, etc." A detailed study of great Pittsburgh performers present and past will constitute a major portion of this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1327 - GLOBAL HIP HOP

Minimum Credits: 3
Maximum Credits: 3
This seminar analyzes how diverse groups of musicians and listeners use hip-hop to express local and transnational claims of belonging through the appropriation of musical genres identified with the West and with African Americans in particular. A closer reading of global hip-hop practices offers insights into the genre's artistic goals and its social profile in a variety of contexts. Through analyses of locally distinct musical expressions, marketing trends within national and global music industries, and state-sponsored policies relating to hip-hop, this course sheds light on hip-hop's role in constituting cultural and political identities among diverse groups of people in the U.S. And abroad.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS The Arts General Ed. Requirement, Hourly Final, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1328 - CREATIVE ETHNOMUSICOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course introduces a diverse students from the University of Pittsburgh and SCI Fayette to music genres from the world. Drawing on examples from Sub-Saharan Africa, Latin America, Mexico and the Caribbean, this course provides students with the analytical tools with which to better comprehend the intertextual nature of sound. Post/colonial studies, race, and gender studies offer a theoretical lens for analyzing the musical traditions in context. Lectures frame the genres within broader theoretical narratives informed by cultural modes of perception and physical reactions to sound. Giving space to develop and share aesthetic emotions, the course fosters a learning environment in which students work individually and in collaborative groups to create informed projects inspired by aspects of the musical traditions covered in the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1332 - MUSIC IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Mexico, Venezuela, Columbia, Panama, and Peru will be the major countries represented in this general survey of the music of Latin America. The course will be taught in a lecture-discussion format with extensive use made of recordings, slides, and films. Some actual performance of drumming traditions will be included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

MUSIC 1340 - MUSIC IN AFRICA

Minimum Credits: 3
Maximum Credits: 3
This course examines the historical social and cultural background of music in Africa with particular reference to music in community life, performing groups, the training of musicians, instrument structures in African music, and the interrelations of music and dance. (Slides, films, and recordings will be used to illustrate lectures.)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

MUSIC 1341 - WEST AFRICAN PERFORMING ARTS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1352 - MUSIC IN SOUTHEAST ASIA

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the musical cultures of southeast Asia; historical, social and cultural background of music, music theory, instruments, and selected musical genres from different countries.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

MUSIC 1356 - MUSIC IN THE MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the musical cultures of the middle East and India; historical, social and cultural background of music, music theory, instruments, and selected musical genres from different countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1358 - MUSIC IN SOUTH ASIA

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the musical cultures of South Asia; historical, social and cultural background of music, music theory, instruments, and selected musical genres from different countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1360 - ROMANI / GYPSY MUSIC

Minimum Credits: 3
Maximum Credits: 3
Gypsy music has emerged as one of the most popular world music genres in the last two decades. The genre's success on the world stage is closely connected with the Romani (gypsy) minority rights movement, which has strengthened on local, national, and international levels due to increased education opportunities for roam, and more positive representation in the media. The present proliferation and popularization of a great variety of musical styles marketed as 'gypsy' points to the fact that Romani musical expressions draw their musical characteristics from Romani and non-Romani elements. Styles are differentiated according to time, place, and cultural influences with regard to ornamentation, language choice, vocal timbres, and choice of instruments. This course analyzes the musical varieties within genres marketed as 'gypsy' and offers broader political, economic, and historical perspectives on a variety of factors rooted in race, ethnicity, gender, and class relations that have contributed to contemporary understandings of 'gypsy' music
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1366 - HYMNS & HIPHOP: SOUNDS OF ISLAM

Minimum Credits: 3
Maximum Credits: 3
From its inception, the Islamic tradition has placed a heavy emphasis on the word and on listening to the word, and has developed a rich and ambiguous relationship to sound. This course draws on theological, historical, anthropological and theoretical perspectives to investigate the this relationship. We discuss various scholarly approaches to the senses, the relationship between listening and power, and the changing conceptions of what it has meant to listen in Islamic culture. In particular, we discuss how new media technologies and popular culture have transformed sound in Muslim communities, and how the ongoing "war on terror" has refashioned Islamic soundscapes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1396 - MUSIC IN SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course will explore critical perspectives on topics such as non-normative music history, queer modes of expression, subcultural music-making, and the implications of mainstream visibility. Along the way, the course will survey some notable lesbian/gay/bisexual/ transgender/queer composers and musicians in both art music and popular music. Course materials include readings, recordings, and possibly musical events and current media.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS The Arts General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

MUSIC 1397 - MUSIC AND RACE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MUSIC 1398 - WOMEN & MUSIC CROSS-CULTL PERSP

Minimum Credits: 3
Maximum Credits: 3
This course is concerned with music of, by, and about women from a cross-cultural perspective. Topics include, but are not limited to, traditional and ritual music, music as empowerment, sexual aesthetics, women as composers and per formers, and feminist music criticism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Writing Intensive Course (WRIT)

MUSIC 1399 - MUSIC AND QUEER IDENTITY

Minimum Credits: 3
Maximum Credits: 3
In this course, we will explore critical perspectives on topics such as non-normative music history, queer modes of expression, subcultural music-making, and the implications of mainstream visibility. Along the way we will survey some notable lesbian/gay/bisexual/ transgender/queer composers and musicians in both art music and popular music.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1421 - COMPOSITION 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to the craft of musical composition, students receive individual instruction in composition, and usually create works using materials from the "common practice" period studied in MUSIC 0417 and 0419. Ability to read music notation fluently.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MUSIC 0417 and 0419
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1422 - COMPOSITION 2

Minimum Credits: 3
Maximum Credits: 3
Starting from the novel premise that two of the most important considerations for composers are 1) how their music sounds and 2) what listeners hear in it, this course explores strategies to develop, edit and otherwise improve the conception, notation, performance and reception of student's compositions.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1431 - INSTRUMENTATION & ORCHESTRATION

Minimum Credits: 3
Maximum Credits: 3
A survey of different styles of instrumentation and orchestration in the European art music tradition. Focus of the course may change from year to year.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1441 - ELECTRONIC AND COMPUTER MUSIC 1

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to composing electronic music. It includes instruction in MIDI and audio sequencing, synthesis, sampling, effects, and other digital audio concepts. Course-work will primarily involve a series of creative projects utilizing a variety of techniques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1442 - ELECTRONIC AND COMPUTER MUSIC 2

Minimum Credits: 3
Maximum Credits: 3
This course is a continuation of MUSIC 1441. It provides further experience in composing music in the university of Pittsburgh computer and electronic music studio, instruction in the advanced digital audio applications, and hard disk recording and editing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MUSIC 1441
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1443 - PROGRAMMING ENVIRONMENTS IN MUSIC - AN INTRODUCTION TO MAX/MSP

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1450 - MUSIC PRODUCTION AND RECORDING

Minimum Credits: 3
Maximum Credits: 3
With the rapid changes taking place in the music industry, it is incumbent that all aspiring musicians and performing artists understand the means and methods of music production and recording. Throughout the semester, students will enjoy (1) hands-on experience, (2) recording projects with guest artists in class, (3) learning simple editing and mastering two-track (stereo) recording, and (4) learning to mix and master multi-track recordings. In-class projects will include actual recording of performers (mainly from the class) with an emphasis on Jazz. Upon completion, students will be able to organize and execute recording sessions of their own. Readings will be assigned throughout the semester; quizzed and individual projects will be used to assess students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MUSIC 1725 - JAZZ AND PROTEST

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

MUSIC 1726 - MARY LOU WILLIAMS: STUDYING JAZZ, GENDER, AND RACE THROUGH A PITTSBURGH ICON

Minimum Credits: 3
Maximum Credits: 3
Few figures in jazz enjoyed a longer or more dynamic career than Mary Lou Williams. After emerging as a child prodigy in Pittsburgh in the 1920s, Williams became one of the most sought-after arrangers of the swing era and a germinal figure in the bebop movement. Her later work included compositions for chamber and symphonic orchestras, a full mass setting, and even concerts with avant garde improvisers. At every turn, Williams cultivated a reputation for elegant arrangements, stalwart professionalism, and a fiercely swinging piano style. This course will examine Williams' storied life and work, paying particular attention to the larger contexts relating to jazz and gender in the 20th century. Like many women artists, Williams never wished to be reduced solely to her genderâa trend too-frequently embedded in patronizing epithets like "the great female pianistâ¦" Our discussions will therefore seek to avoid framing her in overly-reductive ways. We will strive toward a deeper interrogation of how jazz's complexâand often fraughtâdiscourses surrounding gender impacted Williams' career, as well as those of subsequent generations of artists. The course will explore a wide range of texts (some unrelated to Williams) in order to grapple with such issues. In doing so, we seek not only to celebrate the legacy of one major jazz composer, but also to think about the cultural landscapes that underlie the construction of such legacies in the first place.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

MUSIC 1731 - JAZZ COMPOSITION AND ARRANGING 1

Minimum Credits: 3
Maximum Credits: 3
This course develops the students' knowledge of the techniques of jazz-rock composition and arranging. The distinctive features of jazz-rock harmony are studied, and students write arrangements for various instrumental combinations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1732 - JAZZ COMPOSITION AND ARRANGING 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of music 1731. The course develops the student's knowledge of the techniques of jazz-rock composition and arranging. The distinctive features of jazz-rock harmony are studied, and students write arrangements for various instrument combinations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

MUSIC 1741 - JAZZ IMPROVISATION 1

Minimum Credits: 3
Maximum Credits: 3
This course provides an analysis of the techniques of jazz-rock-pop improvisation. Students develop a repertoire of current standards and compose and analyze pieces in several styles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1742 - JAZZ IMPROVISATION 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of music 1741. The course provides an analysis of the techniques of jazz-rock-pop improvisation. Students develop a repertoire of current standards and compose and analyze pieces in several styles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

MUSIC 1900 - MUSIC INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
The music internship provides majors with opportunities to develop skills in music-related professions. Students are responsible for finding an appropriate internship that is approved by a faculty member in music who agrees to oversee the student's work. May be taken for 1-3 credits, based on University guidelines relating to internship requirements. A maximum of 3 credits may be applied toward a music major.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

MUSIC 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Independent study is elected by students who are making significant use of university resources in an independent project not related to any regularly offered course. The project is often off campus, but with some guidance from sponsoring faculty member(s).
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

MUSIC 1903 - SPECIAL TOPICS-DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 3
This course consists of an individual project, exploring a topic not currently covered by any course offering. The student plans and carries out a research project in conjunction with a supervising faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

MUSIC 1904 - SENIOR SEMINAR

Minimum Credits: 3
Maximum Credits: 3
The seminar is required of students wishing to earn a major in music. The topic of the seminar changes, but participants are expected to produce a major research project or other approved project displaying the ability to work independently at an advanced level.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

MUSIC 1970 - UNDERGRADUATE TEACHING ASSISTANT EXPERIENCE

Minimum Credits: 1
Maximum Credits: 3
This course involves student participation as an Undergraduate teaching assistant (UTA) for a music course under the supervision of a faculty member.
Academic Career: Undergraduate

Course Component: Practicum
Grade Component: LG/SNC Elective Basis

National Preparedness and Homeland Security

NPHS 1510 - FEDERAL AND INTERNATIONAL FRAMEWORK FOR EMERGENCY PREPAREDNESS

Minimum Credits: 3
Maximum Credits: 3
NPHS 1510 covers overarching frameworks for the federal government's planning and response to crises. These include the National Response Framework (NRF) and the National Incident Management Systems (NIMS), which establishes the Incident Command System (ICS) and the Emergency Support Functions (ESFs). Because the federal government is the interface with foreign governments for events with transnational elements, international aspects of crisis management and the international context for threat assessment are covered in this course.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: National Prep & Homeland Secur (CERT-1)

NPHS 1520 - STATE AND LOCAL FRAMEWORK FOR EMERGENCY PREPAREDNESS

Minimum Credits: 3
Maximum Credits: 3
All response to crisis begins locally. NPHS 1520 presents ways in which states, regions and localities have implemented response planning for their jurisdictions. It also explores boundaries between federal and state law, and how, for example, decisions are made for evacuation versus sheltering in place. Case studies and models for drafting response plans will be offered and rehearsed, as well as templates for planning and allocation of resources.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: National Prep & Homeland Secur (CERT-1)

NPHS 1530 - ANALYSIS, INTELLIGENCE AND DECISION TOOLS FOR EMERGENCY PREPAREDNESS

Minimum Credits: 3
Maximum Credits: 3
Efforts to professionalize the emergency management workforce include familiarizing the next generation with modern decision support software and analytical tools now used in planning and responding to crises. These include discrete- and agent-based simulation, geographical information systems, pattern recognition, virtual reality and predictive modeling tools. This course will offer introductory experience with these tools in realistic crisis scenarios. NPHS 1530 also will explore realities that are changing the delivery of emergency services to a model based on distributed versus centralized operations.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: National Prep & Homeland Secur (CERT-1)

NPHS 1540 - CAPSTONE COURSE IN EMERGENCY PREPAREDNESS

Minimum Credits: 3
Maximum Credits: 3
Along the lines of workshops conducted by the Defense Advanced Research Projects Agency (DARPA), the capstone course is dedicated to exploring a variety of solutions to a single, complex, interdisciplinary problem - a "wicked" problem - in emergency management. "Wicked" problems are complex problems for which there is an unlimited number of potential solutions, but choosing among them is difficult because they have huge impacts and there are no immediate or ultimate tests of their worth - they are neither true nor false but good or bad. The "wicked" problem considered in NPHS 1540 may change from term to term to meet emerging demands or class composition.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: National Prep & Homeland Secur (CERT-1)

NPHS 1800 - PUBLIC HEALTH PREPAREDNESS AND EMERGENCY RESPONSE

Minimum Credits: 3
Maximum Credits: 3
This course teaches Undergraduates and post-baccalaureate students about the responsibilities, roles, and functions of public health in disaster planning, mitigation, response, and recovery. All classes use real-life disasters and emergencies as learning modules. The course is divided into 3 modules: module 1 covers the role and function of public health in the United States both historically and with the addition of more explicit disaster preparedness and response functions in recent years. Module 2 covers public health priorities and functions in all major forms of disasters, with a particular emphasis on environmental health emergencies, pandemics, and bioterrorism. Module 3 covers organized and spontaneous response activities, including how communities work together (or not) to deal with a wide variety of threats.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: National Prep & Homeland Secur (CERT-1)

NPHS 1900 - INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
Students registered for NPHS 1900 pursue an internship involving work related to national preparedness and emergency management. Students are responsible for securing internships and a faculty member to sponsor the internship. Students should produce academic work in conjunction with their internship, which the faculty sponsor will evaluate and grade. Faculty permission is required prior to enrollment. Consult an advisor for further information.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: National Prep & Homeland Secur (CERT-1)

NPHS 1901 - INDEPENDENT STUDY

Minimum Credits: 3
Maximum Credits: 3
Students registered for NPHS 1901 pursue research on a project related to national preparedness and emergency management under the direction of a faculty member. Students develop a study plan with the faculty member, typically working independently on a paper or report, with occasional meetings. Faculty permission is required prior to enrollment. Consult an advisor for further information.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: National Prep & Homeland Secur (CERT-1)

Neuroscience

NROSCI 0080 - BRAIN AND BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
This course analyzes the relations between brain function and overt behaviors. Topics include: the control of movement, sensory processing, mechanisms controlling sleep, arousal, and other circadian rhythms, hunger and thirst, learning and memory, the biological bases of neuropsychiatric disorders, and the functioning of the cerebral hemispheres. Many clinical disorders will be discussed including language disorders, amnesia, epilepsy, depression, anxiety, schizophrenia, and Alzheimers disease.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

NROSCI 0081 - DRUGS AND BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
This course provides a general background in the fields of neuroscience and psychopharmacology. The course examines the behavioral effects and biological mechanisms of action of the major groups of psychoactive compounds, including stimulants, depressants, narcotics, and hallucinogens. Drugs used in the treatment of common psychiatric neurological disorders, such as schizophrenia, depression, and Parkinson's disease, will also be discussed.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

NROSCI 0083 - UHC BRAIN AND BEHAVIOR

Minimum Credits: 4
Maximum Credits: 4
This course examines the function of the mammalian nervous system. Specific topics include sensation, movement, sleep and wakefulness, hunger, thirst, and various neurological and psychiatric disorders. One class meeting per week will discuss some of the original research articles presented in the general lectures. This course has no prerequisites, although BIOSC 0150 or its equivalent is recommended.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

NROSCI 1000 - INTRO TO NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course examines the anatomy, physiology, and pharmacology of the central and peripheral divisions of the nervous system. Specific topics covered include neuronal function, synaptic transmission, sensory processing, movement, sleep and wakefulness, hunger, thirst, caloric and body fluid homeostasis, recovery of function after brain damage, and various neurological and psychiatric disorders.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: (BIOSC150or170or715or190orBIOL101or110)and(BIOSC160or180or191or716orBIOENG 1071orBIOL102or120)and(CHEM101or110or710or760or960orCHEM111or410)and(CHEM 102or120or720or770or970)or(CHEM420and440)or(CHEM112and114);MINGRAD:`C' for listed Courses
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

NROSCI 1003 - UHC INTRODUCTION TO NEUROSCIENCE

Minimum Credits: 4
Maximum Credits: 4
This honors course examines the anatomy, physiology, and pharmacology of the central and peripheral divisions of the nervous system. Specific topics include neruonal function, synaptic transmission, sensory processing, movement, sleep and wakefulness, hunger, thirst, caloric and body fluid homeostasis, recovery of function after brain damage, and various neurological and psychiatric disorders. Course includes in-depth discussions of original research articles presented in the general lectures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: (BIOSC150or170or715or190orBIOL101or110)and(BIOSC160or180or191or716orBIOENG1071orBIOL102or120)and(CHEM101or110or710or760or960orCHEM111or410)and(CHEM 102or120or720or770or970)or(CHEM420and440)or(CHEM112and114);MINGRAD`B' for Courses; LVL:Fr,So,Jr;MINGPA3.25
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

NROSCI 1011 - FUNCTIONAL NEUROANATOMY

Minimum Credits: 3
Maximum Credits: 3
This course deals with human neuroanatomy and covers the basic structure of the central nervous system from spinal cord to cerebral cortex. Emphasis is placed on major systems and subsystems within the brain, and on their functional significance. The basic structure and morphology of nerve cells will be covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or 1003; MIN GRADE: 'B-' for listed courses; PLAN: Neuroscience (BS or MN)

NROSCI 1012 - NEUROPHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course examines the functioning of neurons and synapses, the basic units responsible for fast communication within the nervous system. The course focuses on the elegant use of electrical mechanisms by the nervous system, and on the powerful quantitative approach to scientific investigation that is fundamental to neurophysiology. Topics include: principles of electric current flow exploited by the nervous system; the basis of the resting potential of neurons; the structure and function of voltage-gated and neurotransmitter-gated ion channels; the generation and propagation of action potentials; the physiology of fast synaptic communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [NROSCI 1000 (MIN GRADE 'B-') or NROSCI 1003 (MIN GRADE 'B-")] and (CHEM 0120 or 0720 or 0770 or 0960 or 0102 or 0112) and (PHYS 0110 and 0111 or 0174 and 0175) and MATH 0220; PLAN: Neuroscience (BS or MN)

NROSCI 1013 - FUNCTIONAL NEUROANATOMY (UHC)

Minimum Credits: 4
Maximum Credits: 4
This is an honors course that deals with issues of how we can understand the function of the human brain through the study of neurological diseases. The manifestations of selected neurological diseases are presented and discussed in the context of how they can be analyzed and understood through application of the findings from basic research in neuroscience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or 1003; Min Grade 'B'

NROSCI 1014 - SPEAKING OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Students will learn strategies for giving presentations about science to both a scientific audience and a public audience. Topics covered will include 1) how to engage our audience, 2) the art of breaking down your message, 3) tips to make clear, interesting slides, and 4) pointers on presentation style. All audiences want to learn interesting new scientific information, and have it delivered as a good story in an understandable manner by a personable, easy to approach person. Communication skills, including knowing your audience and why they are interested in the information you are speaking about, how to translate scientific jargon into understandable concepts for the public, and how to keep the audience engaged will be discussed. Pointers will be given on answering questions, being conversational, and conveying the "big picture". Students will give a number of presentations in this course and learn to receive and give feedback effectively.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NROSCI 1000 or NROSCI 1003 (BOTH MIN GRADE 'B-'); PLAN: Neuroscience (BS or MN)
Course Attributes: University Honors Course

NROSCI 1017 - SYNAPTIC TRANSMISSION

Minimum Credits: 3
Maximum Credits: 3
This course examines the mechanisms by which neruotransmitters are synthesized and released and the biochemistry of synaptic responses. Basic physiological, biochemical, and morphological characteristics of neuronal transmission will be discussed. An emphasis will be placed on the experimental approaches used to examine these processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or 1003; MIN GRADE 'B-' for Listed Courses

NROSCI 1018 - UHC NEUROPHYSIOLOGY

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Attributes: University Honors Course

NROSCI 1026 - FOUNDATIONS OF CLINICAL NEUROPHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This is a three credit advanced elective course that will cover the fundamental and basic principles used in the practice of clinical neurophysiology with the goal of providing an overview of both basic science and clinical topics relevant to performing intraoperative neurophysiological monitoring in a surgical setting. Topics will include anatomy and physiology of the motor and sensory systems and the theoretical basis of electroencephalography, sensory and motor evoked potentials, electromyography, transcranial Doppler and compound action potentials. Students will be able to explain the practical applications of these techniques in the diagnosis of nervous system disorders and in the continuous monitoring of the integrity of the human nervous system during surgical procedures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NROSCI 1000 (MIN GRADE: 'B-') or 1003 (MIN GRADE: 'B-') and (NROSCI 1011 or 1013) and (NROSCI 1012 or 1018); PLAN: Neuroscience (BS or MN)

NROSCI 1027 - NEUROSCIENCE PROSEMINAR

Minimum Credits: 2
Maximum Credits: 2
Program graduate students, postdoctoral fellows, and faculty will present an overview of their respective research topics and discussion of current research articles on that topic. Critical analysis of experiments and research is emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NROSCI 1000 or 1003; MIN GRADE: 'B-' for listed courses; PLAN: Neuroscience (BS or MN)
Course Attributes: Capstone Course

NROSCI 1028 - SIGNALING PATHWAYS IN SYNAPTIC PLASTICITY

Minimum Credits: 3
Maximum Credits: 3
This class focuses on signaling mechanisms, which underlie long-term synaptic plasticity. It will address the molecular pathways, which regulate thresholds for synaptic plasticity, the synaptic machinery for induction and expression of long-term synaptic plasticity and how it is converted to structural changes of the neural network, which might underlie the consolidation of memory. The presentations will be guided by experimental approaches, which have influenced the conceptual framework.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Neuroscience (BS or MN); PREQ: NROSCI 1000 or 1003 (MIN GRADE: B- for listed courses)

NROSCI 1030 - PSYCHTRC DISORDERS AND BRAIN FUNCTION

Minimum Credits: 3
Maximum Credits: 3
This course examines the neurobiological basis of psychiatric disturbances (including schizophrenia, depression, Parkinson's disease, and Huntingtons chorea). The initial portion presents an overview of basic neuropharmacology, with an emphasis on recent findings of relevance to psychiatric disorders. The major portion consists of lectures on the anatomical, physiological, and neurochemical bases for specific psychiatric disturbances, and the mechanism of action of therapeutic drugs used in their treatment. A strong neuroscience background is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [NROSCI 1000 (MIN GRADE 'B-') or NROSCI 1003 (MIN GRADE 'B-')] and NROSCI 1011 or NROSCI 1013; PLAN: Neuroscience (BS or MN)

NROSCI 1032 - FUNCTIONAL ORGANIZATION OF THE HUMAN NERVOUS SYSTEM

Minimum Credits: 3
Maximum Credits: 3

The intent of this course is to examine the biological basis of neurological dysfunction and to use this information to gain further insight into the functional organization of the human nervous system. A disease oriented approach will be used to illustrate localization of function. Well known clinical cases will define the functional consequences of disease or damage to regions of the brain and current information on the mechanisms underlying the disease process or physical damage will be used to provide further insight into the functional alterations that contribute to the deficit.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 (MIN GRADE: 'B-') or 1003 (MIN GRADE: 'B-') and NROSCI 1011 or NROSCI 1013; PLAN: Neuroscience (BS or MN)

NROSCI 1033 - NEURAL BASIS OF VISION

Minimum Credits: 3
Maximum Credits: 3
This course examines the neural basis of visual perception and action. It is divided into four units. The first unit covers methods for studying visual perception and its neural basis and discusses the neural hardware that underlies our ability to see. The second unit covers object recognition, cognitive factors that influence visual perception, and how the way we are planning to use visual information affects the way it is encoded in the brain. Unit three focuses on perceptual decision-making and using visual motion as a model system. We will also touch on some data analysis methods for using psychophysical and neuronal data to figure out how we make decisions based on visual information. The fourth unit will focus on perception of color and depth and on how visual perception develops after birth. Throughout the course, we will focus on what neural mechanisms can tell us about how we perceive the visual world and on how we can design experiments to better understand the relationship between neural mechanisms and perception.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (NROSCI 1000 or NROSCI 1003 (MIN GRADE 'B-')) and NROSCI 1011 or 1013; PLAN: Neuroscience (BS or MN)

NROSCI 1034 - NEURAL BASIS OF COGNITION

Minimum Credits: 3
Maximum Credits: 3
This advanced elective is designed for students interested in learning about the neural basis of higher order cognitive functions, with an emphasis on cortical mechanisms. Topics will include: occipitotemporal mechanisms of visual perception; parietal mechanisms of spatial attention and vision for action; premotor mechanisms of action planning and movement execution; prefrontal mechanisms of working memory and behavioral control; hippocampal mechanisms of episodic memory; multimodal integration and cognitive effort.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000or 1003 (Min Grad 'B-') and NROSCI 1011 or NROSCI 1013; PROG: School of Arts & Sciences; PLAN: Neuroscience (BS or MN)

NROSCI 1036 - NEUROBIOLOGY OF AGING

Minimum Credits: 3
Maximum Credits: 3
This course examines age-related changes in neurobiological systems, including motor, sensory, cognitive, and neuroendocrine. Emphasis will be placed on distinguishing biochemical, molecular, physiological, and behavioral changes associated with normal aging versus changes associated with pathologic conditions such as Alzheimer's disease. Introductory lectures will discuss different theories of aging, how aging is studied in the laboratory, and how these relate specifically to neuroscience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [NROSCI 1000 (MIN GRADE 'B-') or NROSCI 1003 (MIN GRADE 'B-')] and NROSCI 1011 or NROSCI 1013; PLAN: Neuroscience (BS or MN)

NROSCI 1038 - RESEARCH IN BEHAVIORAL NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

NROSCI 1039 - PROCESSING IN NEURAL CIRCUITS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (NROSCI 1000 or 1003) and (NROSCI 1011 or 1013)

NROSCI 1040 - BIOLOGICAL BASIS OF LEARNING AND MEMORY

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide an overview on the neural basis of simple learned behavior like classical conditioning. Topics covered include experimental results obtained by anatomical, electrophysiological and biochemical techniques. Emphasis will be placed on research undertaken in invertebrate and vertebrate models, as well as in isolated mammalian preparations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 (MIN GRADE: 'B-') or 1003 (MIN GRADE: 'B-') and (NROSCI 1012 or 1018) and NROSCI 1017; PLAN: Neuroscience (BS or MN)

NROSCI 1041 - DEVELOPMENTAL NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide an overview of issues that govern the developmental assembly of a complex nervous system. Topics covered include formation of neural tube and neural crest, birth and proliferation of neurons, cell migration, neuronal differentiation, molecular control of neural development, synapse formation, neuron-target interactions, and synaptic plasticity. These topics will be discussed in the context of experimental results obtained by anatomical, biochemical and electrophysiological techniques using vertebrate and invertebrate animals.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or 1003; MIN GRADE: 'B-' for listed courses; PLAN: Neuroscience (BS or MN)

NROSCI 1042 - NEUROCHEMICAL BASIS OF BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
Neurochemistry is the study of the many chemicals - neurotransmitters, neuromodulators, hormones, and more - that influence the brain and nervous system. This class will focus on understanding the role of various neurochemicals in normal (and some abnormal) behavior, from behaviors that seem simple - like eating and sleeping - to complex cognition and social behavior. After an initial unit on neurochemical structure, classification, and signaling pathways, we will segue into topics including sleep and circadian rhythms; sex and social status; reward pathways and addiction; and decision-making. We will also examine the neurochemical basis of selected psychiatric disorders.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or 1003 (MIN GRADE: 'B-'); PLAN: Neuroscience (BS or MN)
Course Attributes: Hourly Final

NROSCI 1043 - NEURAL PLASTICITY

Minimum Credits: 3
Maximum Credits: 3
This class is designed to establish conceptual and technical foundations for students who are interested in plasticity-associated neuroscience. Whereas the class will go through major findings in the plasticity field, the emphasis will be placed on why these findings are important, how these findings were made, and what challenges/debates these findings trigger.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NROSCI 1000 (MIN GRADE: 'B-') or 1003 (MIN GRADE: 'B-'); PLAN: Neuroscience (BS or MN)

NROSCI 1045 - TOPICS IN NEUROSCIENCE

Minimum Credits: 1
Maximum Credits: 6
Flexible subject matter oriented to special topics of interest to the faculty.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (NROSCI 1000 or 1003); MIN GRAD: 'B-' for all listed Courses; PROG: School of Arts and Sciences

NROSCI 1046 - TOPICS IN NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NROSCI 1000 (MIN GRADE: 'B-') or 1003 (MIN GRADE: 'B-'); PLAN: Neuroscience (BS or MN)
Course Attributes: Capstone Course

NROSCI 1048 - UHC TOPICS IN NEUROSCIENCE RESEARCH

Minimum Credits: 2
Maximum Credits: 2
The goal of this course is to learn how to read articles in the field of neuroscience. Assigned readings are the original articles based on laboratory research that provided the source of information concerning three topics: neuroplasticity, hunger and the brain's control of food intake, and thirst and the brain's control of fluid intake.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NROSCI 1049 - RESEARCH TOPICS IN NEUROSCIENCE

Minimum Credits: 1
Maximum Credits: 1
This course is required for all newly declared majors. This course will provide students with an overview of research conducted by neuroscience faculty and familiarize students with potential research topics.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit
Course Requirements: PREQ: NROSCI 1000 or 1003; MIN GRADE: 'B-' for listed courses; PLAN: Neuroscience (BS); LEVEL: SOPHMORE, JUNIOR, SENIOR

NROSCI 1070 - HUMAN PHYSIOLOGY-UHC

Minimum Credits: 4
Maximum Credits: 4
Lectures and reading on the following: (1) functions of the cardiovascular system; (2) respiration; (3) digestion and absorption in the gut; (4) kidney function and the regulation of body fluids; (5) the regulation of metabolism; and (6) reproduction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0180 or 0191 or 0716 or BIOENG 1071 or 1072 or BIOL 0102 or 0120) and [CHEM 0102 or 0120 or 0720 or 0770 or 0970 or (CHEM 0112 and 0114)]; MIN GRADE 'C' for all listed courses
Course Attributes: University Honors Course

NROSCI 1097 - UNDERGRADUATE TEACHING EXPERIENCE

Minimum Credits: 1
Maximum Credits: 2
This course is intended for neuroscience majors who wish to assist faculty in the teaching of a NROSCI core course or a NROSCI advanced elective.

Students and faculty meet regularly to discuss the important topics for each week and effective teaching techniques.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

NROSCI 1111 - FUNCTIONAL NEUROANATOMY HONORS PRACTICE

Minimum Credits: 2
Maximum Credits: 2
This is an honors course that supplements NROSCI 1011 by using several approaches to study the functional organization of the nervous system. Examples of such approaches are studying human and animal brain material and discussing important original papers in neuroanatomy.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or NROSCI 1003 (BOTH MIN GRADE 'B-'); PLAN: Neuroscience (BS or MN)
Course Attributes: University Honors Course

NROSCI 1112 - FUNCTIONAL NEUROANATOMY HONORS PRACTICUM

Minimum Credits: 3
Maximum Credits: 3
This honors course supplements the material in the companion lecture course, NROSCI 1011, in two ways. In the initial laboratory portion of the course, human and animal brain tissue will be examined to provide students a first-hand knowledge of the structures that make up the brain and spinal cord. Subsequently, major journal articles that were key in establishing the scientific principles discussed in NROSCI 1011 will be reviewed. This portion of the course will allow students to gain insights into the methods that neuroscientists use to learn about the nervous system. This is a three credit course and will count as an advance elective for majors.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or 1003; Min Grade 'B-'; COREQ: NROSCI 1011 or 1013; PLAN: Neuroscience (BS or MN)

NROSCI 1140 - BIO BASIS OF LEARNING AND MEMORY-UHC

Minimum Credits: 4
Maximum Credits: 4
This course is designed to provide an overview on the neural basis of simple learned behavior like classical conditioning. Topics covered include experimental results obtained by anatomical, electrophysiological and biochemical techniques. Emphasis will be placed on research undertaken in invertebrate and vertebrate models, as well as in isolated mammalian preparations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (NROSCI 1000 or NROSCI 1003 (BOTH MIN GRADE 'B-')) and (NROSCI 1012 or 1018) and NROSCI 1017; PLAN: Neuroscience (BS or MN); Cumulative Grade Point Average 3.25 or better

NROSCI 1200 - NEUROPHARMACOLOGY OF ADDICTION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide an overview of the biological basis of addiction and the neuropharmacology of drugs of abuse and dependence, including basic principles of drug action as well as comprehensive coverage of the major classes of drugs (opioids, stimulants, nicotine, alcohol, sedatives, cannabis, hallucinogens). Students will study mechanisms of action, effects, pharmacokinetics as well as tolerance and dependence for each of these drugs/drug classes. The reasons for addiction including biological, genetic, cultural and other determinants will be discussed. Students will learn about laboratory-based methods used in addiction research, common pharmacotherapies used to manage alcohol and drug addiction, and consider public health issues associated with addiction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or 1003; MIN GRADE 'B-' for all listed courses

NROSCI 1250 - HUMAN PHYSIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course begins with a general introduction on cell biology, physiology of nerves and muscle, and intercellular communication. The course will then survey the function of the following systems: cardiovascular, respiratory, renal, and gastrointestinal. Each system discussed will be integrated into the larger function of homeostasis, emphasizing its adaptation during pathology and challenges (e.g., exercise). The formal lectures will be supplemented by a required recitation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOENG 1071 or BIOENG 1072 or BIOL 0102 or 0120) and [(CHEM 0120 or 0720 or 0770 or 0970 or 0102 or (0112 and 0114)]; Min Grade 'C' for all courses listed

NROSCI 1410 - TRANSLATING SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Students will work in creative teams of 2-3 students/team to develop creative new outreach tools for communication of science to the public (new lectures, videos, films, activities). At the beginning of the semester, didactic lectures will cover background information about how to effectively communicate scientific information, how to break down a message, production of effective engaging slides, animations and videos, and the use of hands-on activities to engage the audience. Guest speakers with expertise in film, video and use of museum exhibits will be included. Students will then choose a topic area they wish to create an outreach lecture/video/etc. In, and with the assistance of dr. Cameron will choose a scientific advisor with specific expertise on the topic for which an outreach tool will be developed. Students will do background reading for the development of their outreach tool and have discussions with their advisor. If developing a lecture, students will develop a set of PowerPoint slides for the lecture, the lecture text with background references, and hands-on activities to complement the lecture for both a junior high and high school version of the lecture. They will present the lecture to one of the grade levels for which it was designed. For other activities, the activity will be developed along with background information regarding the use of the activity. The activity will be presented to a public group.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: NROSCI 1000 or NROSCI 1003 (BOTH MIN GRADE 'B-') and NROSCI 1014; PLAN: Neuroscience (BS or MN)

NROSCI 1800 - NEUROSCIENCE/WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is restricted to neuroscience majors & minors and fulfills the writing requirement for the major. It includes extra emphasis on and credit for instruction in proper writing for the discipline of neuroscience using topics from an appropriate co-requisite neuroscience course taken in the same term.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002,0006,0020,0200,0203,0205,0207,0208,0210 or 0212) or ENGFLM 0210 or FP (0003, 0006); CREQ: NROSCI 1014,1028, 1030,1032,1033,1034, 1036, 1038, 1039, 1041, 1040,1042, 1043, 1046, 1112 1140,1200 or 1027; PLAN: NROSCI (BS or MN)
Course Attributes: Writing Intensive Course (WRIT)

NROSCI 1801 - NEUROSCIENCE/WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This course is restricted to neuroscience majors & minors and fulfills the writing requirement for the major. It includes extra emphasis on and credit for instruction in proper writing for the discipline of neuroscience using topics from an appropriate co-requisite neuroscience course taken in the same term.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002,0006, 0020,0200,0203,0205,0207,0208, 0210 or 0212) or ENGFLM 0210 or FP (0003,0006); CREQ: NROSCI 1014, 1028,1030,1032,1034,1140, 1036, 1038, 1039, 1041, 1046, 1112, 1040,1043,1042,1200 or 1027; PLAN: NROSCI (BS or MN)
Course Attributes: Capstone Course, Writing Intensive Course (WRIT)

NROSCI 1900 - INTERNSHIP EXPERIENCE

Minimum Credits: 1
Maximum Credits: 3
Students may earn 1-3 credits for approved, supervised field experiences related to neuroscience. A faculty sponsor must agree to provide and review academic assignments related to the practical experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

NROSCI 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
This course involves student participation in neuroscience research supervised by a faculty member of the department of neuroscience or some other department in which neuroscience research is performed. This course is particularly valuable for students interested in graduate study of neuroscience.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

NROSCI 1903 - INTERNSHIP CAPSTONE

Minimum Credits: 3
Maximum Credits: 6
Students may earn 1-3 credits for approved, supervised field experiences related to neuroscience. A faculty sponsor must agree to provide and review academic assignments related to the practical experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

NROSCI 1961 - THESIS RESEARCH

Minimum Credits: 1
Maximum Credits: 6
This course involves independent neuroscience research leading to the preparation and defense of a written thesis. This course involves student participation in neuroscience research supervised by a faculty member of the department of neuroscience or some other department in which neuroscience research is performed.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

NROSCI 1962 - THESIS RESEARCH/WRITING

Minimum Credits: 1
Maximum Credits: 1
This course involves writing a thesis based on independent neuroscience research that is supervised by a faculty member of the department of neuroscience or some other department in which neuroscience research is performed.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Intensive Course (WRIT)

NROSCI 2014 - SPEAKING OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Fulfills neuroscience advanced elective requirement. You will learn strategies for giving presentations about science to both a scientific audience and a public audience. Topics covered will include (1) how to engage your audience, (2) the art of breaking down your message, (3) tips for how to make clear, interesting slides, and (4) pointers on presentation style. All audiences want to learn interesting new scientific information, and have it

delivered as a good story in an understandable manner by a personable, easy to approach person. You want to emphasize your message, stay focused, and convey the importance of your message while being interesting, maintaining the attention of the audience and making the learning process enjoyable. Guest speakers will provide background information about various uses of scientific information in the public domain. Communication skills, including knowing your audience and why they are interested in the information you are speaking about, how to translate scientific jargon into understandable concepts for the public, and how to keep the audience engaged will be discussed. Pointers will be given on answering questions, being conversational, and conveying the "big picture". Students will give a number of presentations in this course and learn to receive and give feedback effectively.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Neuroscience (PhD) or Neurobiology (PhD)

NROSCI 2410 - TRANSLATING SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Students will work in creative teams of 2-3 students/team to develop creative new outreach tools for communication of science to the public (new lectures, laboratories, videos, films, activities). At the beginning of the semester, didactic lectures will cover background information about how to effectively communicate scientific information, how to break down a message, production of effective, engaging slides, animations and videos, and the use of hands-on activities to engage the audience. Guest speakers with expertise in film, video and use of museum exhibits will be included. Students will then choose a topic area they wish to create an outreach lecture/video/etc. In, and with the assistance of dr. Cameron you will choose a scientific advisor with specific expertise on the topic you will develop an outreach tool for. Students will do background reading for the development of their outreach tool and have discussions with their advisor. If developing a lecture, students will develop a set of PowerPoint slides for the lecture, the lecture text with background references, and hands-on activities to complement the lecture for both a junior high and a high school version of the lecture. They will present the lecture at one of the grade levels it was designed for. For other activities, the activity will be developed along with background information regarding the use of the activity. The activity will be presented to a public group.
Academic Career: GRAD
Course Component: Lecture
Grade Component: GradLG/SU3

Nursing

NUR 0001 - FIRST YEAR SEMINAR

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide beginning nursing students with an overview of the nursing profession and an introduction to the school of nursing. The purpose of the course is to facilitate the students' adjustment to the University environment and to acquaint them with the skills and resources available to promote success.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: H/S/U Basis
Course Requirements: School of Nursing students only.

NUR 0002 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 1

Minimum Credits: 1
Maximum Credits: 1
This laboratory course is designed to provide students with hands-on experience related to the anatomy and physiology of the human body. Laboratory sessions complement the lecture component of NUR 0012. Laboratory instruction emphasizes structure and how it relates to function and the maintenance of homeostasis in the whole body.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 0012

NUR 0003 - NURSING ANATOMY AND PHYSIOLOGY LABORATORY 2

Minimum Credits: 1
Maximum Credits: 1
This laboratory course is designed to provide students with hands-on experience related to the anatomy and physiology of the human body. Laboratory sessions complement the lecture component of NUR 0013. Laboratory instruction emphasizes structure and how it relates to function and

the maintenance of homeostasis in the whole body.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 0013

NUR 0005 - HONORS FRESHMAN SEMINAR

Minimum Credits: 1
Maximum Credits: 1
Using a flexible format, this course is designed to provide beginning nursing students with an overview of the University Honors College and the honors track within the school of nursing. The purpose of this course is to facilitate the students' exposure to the University of Pittsburgh Honors College environment, and to acquaint them with the opportunities and resources that are available to promote success in the honors track in the school of nursing.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: H/S/U Basis

NUR 0012 - HUMAN ANATOMY AND PHYSIOLOGY 1

Minimum Credits: 3
Maximum Credits: 3
This course is designed to present students with a basic foundation in normal human anatomy and physiology. Topics covered are: cell physiology, histology, integumentary, skeletal, muscular, nervous and sensory systems. Emphasis is on the interaction of structure and function and the mechanisms which maintain homeostasis in the human body.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NUR 0013 - HUMAN ANATOMY AND PHYSIOLOGY 2

Minimum Credits: 3
Maximum Credits: 3
This course is designed to present students with a basic foundation in normal human anatomy and physiology. Body systems covered include: endocrine, cardiovascular, respiratory, digestive, urinary, reproductive, and embryological development. Emphasis is on the interaction of structure and function and the mechanisms which maintain homeostasis in the human body.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 0012

NUR 0020 - PATHOPHYSIOLOGIC FOUNDATIONS OF NURSING CARE

Minimum Credits: 4
Maximum Credits: 4
This course will examine mechanisms that produce disease and injury, the ways in which the body responds to these mechanisms, and the clinical manifestations produced by the body's response.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0013

NUR 0031 - MICROBIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This lecture course will introduce students to the basic properties of bacteria, archaea, eukaryotic microorganisms and viruses, with an emphasis on bacteria. The diversity within the microbial world will be emphasized, as well as their relevance to the health and diseases of humans. Approaches for controlling the growth of microbes in the environment and for preventing the spread of infectious diseases will also be discussed. In addition, students will also become familiar with host-microorganism interactions and host-immune responses.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

NUR 0032 - MICROBIOLOGY LABORATORY

Minimum Credits: 1
Maximum Credits: 1
This laboratory course will provide students with hands-on experience in terms of the techniques used to detect, grow, isolate and identify microorganisms.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: Letter Grade
Course Requirements: COREQ: NUR 0031

NUR 0051 - INTRODUCTION TO PROFESSIONAL NURSING

Minimum Credits: 3
Maximum Credits: 3
This course provides a broad overview and synthesis of the issues and trends most relevant to the practice of professional nursing. Historical, contemporary and potential influences on professional nursing practice are reviewed. An emphasis on the unique and varied roles of nurses in today's interdisciplinary health care environment are examined within the context of individual, family, community, and global health. Characteristics and major changes in health care delivery systems (federal, state, and local) are discussed. Components of professional nursing values and core practice competencies are presented. The concept of an evidence-based approach to clinical practice is introduced. Critical thinking strategies are introduced in the context of the nursing process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Nursing students only.

NUR 0053 - INTRODUCTION TO INCLUSION, EQUITY, AND DIVERSITY IN HEALTH CARE

Minimum Credits: 1
Maximum Credits: 1
The purpose of this course is to increase understanding of how health care relates to the concepts of inclusion, equity and diversity domestically and globally. It will provide an overview of how these concepts influence the health of individuals and populations, and our role in applying them. We will define diversity in its broadest meaning but focus on exploring local communities looking at diversity in culture, race, ethnicity, gender, ability, socioeconomics, sexual orientation, and immigration. During this exploration, community strengths and capacity to promote positive change will be presented. The goals of this course are to increase our value of and advocacy for inclusion, equity and diversity in health care. Learning activities will support skill development to interact productively with a variety of individuals and groups. Key components of this course are direct engagement with diverse individuals, self-reflection, and community-engaged learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: H/S/U Basis
Course Requirements: PLAN: Nursing - BSN

NUR 0066 - NUTRITION FOR CLINICAL PRACTICE

Minimum Credits: 3
Maximum Credits: 3
This course focuses on nutrition for clinical practice for nurses. Food for energy and the major nutrients are considered for the promotion of health and for medical nutrition therapy for selected disruptions of health. Emphasis is placed on nutrition assessment and interventions in relation to the goals of the current healthy people document and dietary guidelines for Americans.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NUR 0067 - NURSING RESEARCH: AN INTRODUCTION TO CRITICAL APPRAISAL AND EVIDENCE-BASED PRACTICE

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide the opportunity for students to become consumers of research and to provide the basis for evidence-based practice

and the provision of culturally-congruent care. Students gain an understanding of research processes to the development of nursing knowledge and the contributions of research to evidence based practice Students are expected to critically appraise research articles, to identify useful, valid research that can be applied to nursing practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0088 or STAT 1000

NUR 0080 - FOUNDATIONS OF NURSING PRACTICE 1

Minimum Credits: 3.5
Maximum Credits: 3.5
This course focuses on the concepts of communication, therapeutic intervention, and decision-making as they relate to the nursing process. Techniques of assessment of the physical, psychological, and developmental dimensions of the individual are explored through a variety of learning strategies. Variations of expected findings based on influences such as age, social condition, and culture are discussed. Emphasis is placed on the therapeutic interventions of safety, hygiene and comfort, health assessment and health promotion.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0003 and 0051; CREQ: NUR 0020 and 0087

NUR 0080C - FOUNDATIONS OF NURSING PRACTICE 1 CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course is designed to provide clinical experiences related to the theory provided in Foundations of Nursing Practice 1. Techniques used in the assessment of the physical, psychological and development dimensions of the individual within an acute care setting are demonstrated. Variations of findings based on influences such as age and culture are identified. Emphasis is placed on the therapeutic interventions of safety, hygiene and comfort, health assessment and health promotion.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 0080

NUR 0081 - FOUNDATIONS OF NURSING PRACTICE 2

Minimum Credits: 2
Maximum Credits: 2
This course builds on the fundamental skills learned in NUR 0080. The focus is on direct practice and correct manipulation of equipment during the performance of psychomotor skills. During laboratory sessions, students will have the opportunity to practice simulated clinical skills. The nursing process and clinical reasoning will serve as the framework for decision-making during skill performance. Through active laboratory participation, the student will demonstrate self-direction as a learner.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0080 and 0020 and 0087 and (NUR 0080C or NUR 0090)

NUR 0082 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the nursing care of adults, including older adults, with acute and/or chronic illnesses. Students will be guided in critical thinking exercises and the use of therapeutic interventions and research findings in the management of adults. Nursing process, critical thinking, and decision-making serve as the framework for acquisition of knowledge for the management of patients. Societal and cultural influences will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0020 and NUR 0080 and NUR 0087; CREQ: NUR 0081 and NUR 0082C

NUR 0082C - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL

Minimum Credits: 4
Maximum Credits: 4
This course focuses on the nursing care of adults, including older adults, with acute and/or chronic illnesses. Students will be guided in critical thinking exercises and the use of therapeutic interventions and research findings in the management of adults with acute and/or chronic illnesses. During clinic, students will have the opportunity to practice clinical skills learned in the lab. Nursing process, critical thinking, and decision-making serve as the framework for acquisition of clinical psychomotor skills. Common concepts of care will be emphasized, including societal and cultural influences.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 0082

NUR 0086 - NURSING INFORMATICS

Minimum Credits: 2
Maximum Credits: 2
This course focuses on concepts relevant to the practice of nursing informatics. The course emphasizes information technology applications and the principles of nursing informatics from a current and historical perspective. Learners will examine the analysis of healthcare data and its transformation to nursing knowledge. Nursing language concepts and their importance in clinical information system development will be identified. Learners will examine information technologies that manage clinical information and support patient care. Social and ethical issues in the context of clinical information systems will be examined. The impact of evolving/emerging information technologies on healthcare provider and consumer roles will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0088 or STAT 1000; COREQ: NUR 1680; PROG: School of Nursing

NUR 0087 - PHARMACOLOGY AND THERAPEUTICS ACROSS THE LIFESPAN

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to pharmacology that integrates the concepts of physiology, pathophysiology, chemistry, and nursing fundamentals to build a foundation for administering drug therapy to patients. Using a simple to complex approach, key content areas are presented to help conceptualize the important components related to pharmacology. The basic concepts of pharmacology, such as drug testing and approval, pharmacokinetics and pharmacodynamics, pharmacotherapeutics and toxic effects, dosage calculations, and challenges related to drug therapy, provide the foundation from which drug therapy associated with specific body systems can be addressed. Discussion of the major drug groups focuses on therapeutic actions and indications, mechanism of action, pharmacokinetics, contraindications and precautions, adverse effects, clinically important drug-drug interactions and nursing implications which emphasize the nursing process and focus on patient care and education. Prototypes of the major drug groups are emphasized. Lifespan considerations, evidence for best practice, patient safety, and critical thinking are integrated throughout the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHEM 0910 and NUR 0012 and NUR 0013 and (NUR 0031 or ORBIOL 0031)

NUR 0088 - INTRODUCTION TO BASIC STATISTICS FOR EVIDENCE-BASED PRACTICE

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to descriptive statistics and parametric and nonparametric statistical tests that are commonly used by researchers in the health sciences and appear in published research reports. Emphasis is placed on student mastery of concepts and principles that are fundamental to descriptive and inferential statistics, as well as interpretation and critical appraisal of their use in research studies. Opportunities are provided to manipulate data, perform basic statistical tests, and summarize findings in tabular, graphical, and narrative form.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Nursing students only.

NUR 0090 - FOUNDATIONS OF NURSING PRACTICE 1 CLINICAL

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide clinical experiences related to the theory provided in Foundations of Nursing Practice 1. Techniques used in the

assessment of the physical, psychological and development dimensions of the individual within an acute care setting are demonstrated. Variations of findings based on influences such as age and culture are identified. Emphasis is placed on the therapeutic interventions of safety, hygiene and comfort, health assessment and health promotion.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 0080; PLAN: Nursing (BSN)

NUR 0092 - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL

Minimum Credits: 3.5
Maximum Credits: 3.5
This course focuses on the nursing care of adults, including older adults, with acute and/or chronic illnesses. Students will be guided in critical thinking exercises and the use of therapeutic interventions and research findings in the management of adults with acute and/or chronic illnesses. During clinic, students will have the opportunity to practice clinical skills learned in the lab. Nursing process, critical thinking, and decision-making serve as the framework for acquisition of clinical psychomotor skills. Common concepts of care will be emphasized, including societal and cultural influences.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 0082; PLAN: Nursing (BSN)

NUR 1020 - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This clinical course focuses on the nursing care of adults with acute and complex illnesses in a hospital setting. Emphasis is placed on using the nursing process to assist students with the development of priority nursing goals and in applying critical thinking skills to patient care. The clinical nursing responsibilities include interpretation of diagnostic studies, medical/surgical patient management, evaluation of outcomes, health promotion, and support for individuals and families experiencing acute and complex health problems. This course includes application of cultural diversity awareness training to the nursing process. Clinical learning is focused on developing and refining the knowledge and skills to manage patient care as part of inter-professional teams. Clinical experiences are offered in acute care, critical care, and monitored units.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1120; PLAN: Nursing (BSN)

NUR 1021C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course focuses on the management of the adult who experiences an acute or complex illness with an alteration in multiple body systems. The students' ability to apply the nursing process, using critical thinking skills, is expanded through clinical activities. Collaboration with interdisciplinary health professionals in health promotion and restoration is fostered.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1121

NUR 1042 - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course focuses on nursing practice for restoration and maintenance of health in children in various stages of development within their families and the broader social contexts in which children grow and develop. Nursing approaches used in the clinical setting are based on the use of best evidence, developmental perspectives, and cultural competence. The nursing process is applied to the child and family to minimize the effects of stressors which have resulted in a disruption of health. There is an emphasis on critical thinking and decision making as the student applies theory to nursing care.
Academic Career: Undergraduate
Course Component: Clinical

Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1052; PLAN: Nursing (BSN)

NUR 1050 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES

Minimum Credits: 2.5
Maximum Credits: 2.5
This course provides an introduction to the process of childbirth and the dynamics of the childbearing family. It explores the areas of health promotion, physiologic changes associated with pregnancy, high risk conditions associated with pregnancy and the development of the fetus and newborn. Emphasis is on adaptation to the biopsychosocial needs of the childbearing family with sensitivity to the cultural needs and ethical issues of a diverse population. Critical thinking, problem solving, stress adaptation, role, family and nursing theories provide a major focus for understanding childbearing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0066 and 0082 and NUR 0087

NUR 1050C - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL

Minimum Credits: 2.5
Maximum Credits: 2.5
This course provides an introduction to the process of childbirth and the dynamics of the childbearing family. It explores the areas of health promotion, physiologic changes associated with pregnancy, high risk conditions associated with pregnancy and the development of the fetus and newborn. Emphasis is on adaptation to the biopsychosocial needs of the childbearing family with sensitivity to the cultural needs and ethical issues of a diverse population. Critical thinking, problem solving, stress adaptation, role, family and nursing theories provide a major focus for understanding childbearing. Clinical experiences reflect a diversity of settings including outpatient, inpatient, and community programs that provide services to the childbearing family.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1050

NUR 1052 - NURSING CARE OF CHILDREN AND THEIR FAMILIES

Minimum Credits: 2.5
Maximum Credits: 2.5
This course focuses on the unique health and developmental needs of infants, children and adolescents with an emphasis on family-centered care. The course incorporates principles of assessment, planning and implementation of nursing interventions appropriate for health promotion, wellness, health restoration and various complex health problems. Nursing approaches are based on the use of best evidence, developmental perspectives, and cultural competence with a focus on critical thinking.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0066 and 0082 and 0087

NUR 1052C - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course focuses on nursing practice for restoration and maintenance of health in children in various stages of development within their families and the broader social contexts in which children grow and develop. Nursing approaches used in the clinical setting are based on the use of best evidence, developmental perspectives, and cultural competence. The nursing process is applied to the child and family to minimize the effects of stressors which have resulted in a disruption of health. There is an emphasis on critical thinking and decision making as the student applies theory to nursing care.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1052

NUR 1054 - NURSING CARE OF OLDER ADULTS

Minimum Credits: 2
Maximum Credits: 2
This course is designed to ensure competency in providing evidence-based nursing care to older adults and their families, across a continuum of health care settings. Attention is given to the complex interaction of acute and chronic co-morbid conditions, interdisciplinary collaboration, the recognition of risk factors, valid and reliable health assessment, and individualized and evidence-based care for older adults across a continuum of health care settings. The influence of attitudes, age, gender, race, culture, religion, language, lifestyle, technology, and health care policy on the biological, psychological, and social functioning of older adults is considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0082; PROG: School of Nursing

NUR 1054C - NURSING CARE OF OLDER ADULTS CLINICAL

Minimum Credits: 1
Maximum Credits: 1
This course is designed to ensure competency in providing evidence-based nursing care to older adults and their families, across a continuum of health care settings. Attention is given to the complex interaction of acute and chronic co-morbid conditions, interdisciplinary collaboration, the recognition of risk factors, valid and reliable health assessment, and individualized care for older adults across a continuum of health care settings. The influence of attitudes, age, gender, race, culture, religion, language, lifestyle, technology, and health care policy on the biological, psychological, and social functioning of older adults is considered.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1054

NUR 1057 - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course provides an introduction to the process of childbirth and the dynamics of the childbearing family. It explores the areas of health promotion, physiologic changes associated with pregnancy, high risk conditions associated with pregnancy and the development of the fetus and newborn. Emphasis is on adaptation to the biopsychosocial needs of the childbearing family with sensitivity to the cultural needs and ethical issues of a diverse population. Critical thinking, problem solving, stress adaptation, role, family and nursing theories provide a major focus for understanding childbearing. Clinical experiences reflect a diversity of settings including outpatient, inpatient, and community programs that provide services to the childbearing family.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1050; PLAN: Nursing (BSN)

NUR 1060 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS

Minimum Credits: 2.5
Maximum Credits: 2.5
This course is designed to teach basic psychiatric mental health nursing concepts and their application to clinical practice. Classroom learning is focused on developmental, psychological, and biological theories in order to enhance understanding of psychiatric illness. Major psychiatric illnesses throughout the lifespan as well as contemporary methods of treatment are addressed. Emphasis is placed on understanding the unique contributions of social and cultural factors to mental health.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0066 and NUR 0082 and NUR 0087; CREQ: NUR 1120

NUR 1060C - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course focuses on nursing practice of health promotion and restoration in individuals with mental health problems. Application of theoretical concepts and nursing interventions is the focus of the clinical experience in acute, chronic, and community mental health settings. Emphasis is placed on understanding the unique contributions of social and cultural factors in the development of treatment plans for clients experiencing psychiatric problems.

Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1060

NUR 1061 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study is a student-initiated experience planned to permit students to pursue an area of interest in nursing with guidance of a faculty preceptor.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis

NUR 1066 - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course focuses on nursing practice of health promotion and restoration in individuals with mental health problems. Application of theoretical concepts and nursing interventions is the focus of the clinical experience in acute, chronic, and community mental health settings. Emphasis is placed on understanding the unique contributions of social and cultural factors in the development of treatment plans for clients experiencing psychiatric problems.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis

NUR 1074 - PROFESSIONAL DEVELOPMENT AND PRACTICUM 1

Minimum Credits: 3
Maximum Credits: 3
This course enables the registered nurse student to further develop critical thinking, leadership abilities, communication and decision-making skills in the development and implementation of an evidence-based clinical capstone project to enhance patient care quality. A systematic approach is used to identify a clinical topic for evidence-based literature review, presentation, and evaluation. Each student identifies specific learning activities for the practicum, which relate directly to a selected culturally diverse environment. Under the guidance of faculty and a clinical preceptor, didactic seminars, assignments, and mentored clinical practicum are used to foster independence and self-direction for all students.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0067 or 2000 or 2001

NUR 1077 - SCHOOL NURSE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course is designed to prepare the professional nurse for certification as a school nurse in Pennsylvania; both the theory component (NUR 1077) and the practicum (NUR 1078) are required for eligibility. The role of the school nurse is explored through the historical, legal, ethical, research and practice perspectives. The biological, physical, developmental, behavioral, cultural and psychosocial needs of children of all ages in the school setting are examined. Throughout the course, current evidence related to school nursing and Pennsylvania educational requirements is applied to the health needs of school age children, including those with special health and learning needs, the culturally diverse and English language learners (ell's). The independent and collaborative aspects of the school nurse role are explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 1078; PROG: School of Nursing

NUR 1077D - SCHOOL NURSE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course is designed to prepare the professional nurse for certification as a school nurse in Pennsylvania. The role of the school nurse is explored

through the historical, legal, ethical, research and practice perspectives. The biological, physical, developmental, behavioral, cultural and psychosocial needs of children of all ages in the school setting are examined. Throughout the course, current evidence related to school nursing and Pennsylvania educational requirements is applied to the health needs of school age children, including those with special health and learning needs, the culturally diverse and English language learners (ELL's). The independent and collaborative aspects of the school nurse role are explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 1078
Course Attributes: Distance Education

NUR 1078 - SCHOOL NURSE PRACTICUM

Minimum Credits: 3
Maximum Credits: 3
This course is designed to prepare the professional nurse for certification as a school nurse in Pennsylvania; both the theory component (NUR 1077) and this practicum (NUR 1078) are required for eligibility. This course provides the required 100 hours of clinical practicum experience in elementary, middle and high school settings. The nursing care of children requiring acute, chronic and episodic care is performed under the guidance of an experienced school nurse. Throughout the course, the application of the nursing process and evidence-based approaches are employed when providing nursing services to school age children. Interdisciplinary care and management for school age children with special health and learning needs, including the culturally diverse and English language learners (ELL's) is emphasized. The independent and collaborative aspects of the school nurse role are explored within the school setting.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 1077; PROG: School of Nursing

NUR 1079 - PROFESSIONAL DEVELOPMENT AND PRACTICUM 2

Minimum Credits: 3
Maximum Credits: 3
This course enables the registered nurse student to further develop oral and written communication, critical thinking, and leadership skills through the presentation, implementation, and evaluation of an evidence-based clinical practice process during the clinical practicum. Under the guidance of faculty and a clinical preceptor, didactic seminars, assignments, and mentored clinical practicum are used to foster leadership skills, independence and self-direction with a clinical project for all students.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 1074; PROG: School of Nursing

NUR 1084 - ADVANCED CARE OF THE ADULT 2

Minimum Credits: 4
Maximum Credits: 4
This course is a continuation of NUR 1082 and includes nursing care of adults experiencing acute/complex alterations in multiple body systems. Practice settings include acute/critical care units. Emphasis on prioritization of nursing care, technology/bioinstrumentation, patient and family role adaptation and multiple body system alterations. Roy's adaptation model and Watson's theory serve as base. Pathophysiology, diagnostic studies, associated nursing responsibilities and medical-surgical management are included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Nursing students only.

NUR 1085 - ETHICS IN NURSING AND HEALTH CARE

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the domain of clinical ethics as a foundation for developing ethical expertise in nursing practice. The course focuses on contemporary nursing and health care issues that raise personal and professional ethical concerns. Emphasis is placed on cultural differences, current legislation, political and religious controversy, economic constraints, and professional commitment related to the resolution of the identified ethical dilemmas. The process of ethical analysis and reasoning is used to resolve representative patient and health care situations.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0082

NUR 1087 - TRANSITION INTO PRACTICE

Minimum Credits: 5
Maximum Credits: 5
This course focuses on facilitating the transition to professional practice through the use of agency preceptors to increase independence and responsibility for patient care in an intensive clinical experience. Leadership principles are utilized in the management of small groups of clients and unit personnel. Progressive acquisition of skills in clinic decision-making will be emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: H/S/U Basis
Course Requirements: School of Nursing students only.

NUR 1095 - COMMUNITY CONNECTOR COURSE

Minimum Credits: 2
Maximum Credits: 2
This course is especially well-suited for students from SHRS, PHARM, NUR and School of Social Work. This seminar focuses on the patient population which is a high risk population who are vulnerable to frequent readmissions to the hospital. Emphasis will be placed on: 1) understanding this patient population, the health system and health behavior challenges associated with this population, and systematic needs associated with reducing their health care needs 2) The course will include presentations by researchers, clinicians, and healthcare industry experts. Students will need to be available for approximately 6, out-of-classroom activities during the semester. This course will expose students to the patient population through visits with clinicians at the hospital, home, and community, including in-home assessments, patient education sessions, and behavior change (motivational interviewing) techniques. Students may me paired with a nurse, speech language pathologist, occupational therapist, or physical therapist during one of these activities. Each out-of-classroom visit often requires a 4-hour block of time.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

NUR 1120 - ADVANCED NURSING MANAGEMENT ADULT ACUTE/COMPLEX HEALTH PROBLEMS

Minimum Credits: 2.5
Maximum Credits: 2.5
This course focuses on the patient centered nursing care of adults experiencing acute and complex illnesses. Emphasis is placed on the prioritization and decision making processes of nursing care and the nursing responsibilities associated with translating, integrating and applying medical/surgical management, evaluation of outcomes, health promotion, and support for individuals and families experiencing acute and complex health problems. This course will also discuss the increasing diversity of this nation's population as expressed through age, racial, ethnic, gender, cultural, spiritual and sexual orientation. Discussions will occur with the effect of socio-economic differences and how it may affect the patient's overall health care. Discussion of interdisciplinary collaboration healthcare professional is emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0066 and NUR 0067 and NUR 0082 and NUR 0087

NUR 1120C - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL

Minimum Credits: 2.5
Maximum Credits: 2.5
This clinical course focuses on the nursing care of adults with acute and complex illnesses in a hospital setting. Emphasis is placed on using the nursing process to assist students with the development of priority nursing goals and in applying critical thinking skills to patient care. The clinical nursing responsibilities include interpretation of diagnostic studies, medical/surgical patient management, evaluation of outcomes, health promotion, and support for individuals and families experiencing acute and complex health problems. This course includes application of cultural diversity awareness training to the nursing process. Clinical learning is focused on developing and refining the knowledge and skills to manage patient care as part of inter-professional teams. Clinical experiences are offered in acute care, critical care, and monitored units.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1120

NUR 1121 - ADVANCED CLINICAL PROBLEM SOLVING

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the nursing management of the adult who experiences an acute or complex illness with an alteration in multiple body systems. The students' ability to apply the nursing process, using critical thinking skills, is expanded through classroom and case study activities. Professional competence is enhanced through the utilization of high fidelity human simulation technology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 1052 and 1054 and 1060; PROG: School of Nursing

NUR 1121C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This course focuses on the nursing management of the adult who experiences an acute or complex illness with an alteration in multiple body systems. The students' ability to apply the nursing process, using critical thinking skills, is expanded through clinical activities. Collaboration with interdisciplinary health professionals in health promotion and restoration is fostered
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1121

NUR 1127 - COMMUNITY HEALTH NURSING

Minimum Credits: 3
Maximum Credits: 3
This course will provide the student with a broad introduction to community health and the role of nursing within this context. Students will explore epidemiology; health promotion and disease prevention within groups; individual and family case management; community assessment and intervention; environmental hazards; and factors influencing the delivery of and access to community health services. The health care needs of selected at-risk populations will be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 0067; PROG: School of Nursing

NUR 1127C - COMMUNITY HEALTH NURSING CLINICAL

Minimum Credits: 0.5
Maximum Credits: 0.5
The overall objective of this course is to provide the student with a broad introduction to community health and the role of nursing within this context. Students will experience independence and collaboration with community-based clinicians in a variety of settings. Students will have opportunities to apply epidemiology; health promotion and disease prevention within groups; individual and family case management; community assessment and intervention; environmental hazards; and factors influencing the delivery of and access to community health services at the individual, family, and aggregate levels.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1128

NUR 1128 - COMMUNITY HEALTH NURSING

Minimum Credits: 2.5
Maximum Credits: 2.5
The overall objective of this course is to provide the student with a broad introduction to community health and the role of nursing within this context. Students will explore epidemiology; health promotion and disease prevention within groups; individual and family case management; community assessment and intervention; environmental hazards; and factors influencing the delivery of and access to community health services. The health care needs of selected at-risk populations will be examined.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: (NUR 1120 or 1220) and (NUR 1050 or 1250) and (NUR 1060 or 1260) and (NUR 1052 or 1252)

NUR 1128C - COMMUNITY HEALTH NURSING CLINICAL

Minimum Credits: 2.5
Maximum Credits: 2.5
The overall objective of this course is to provide the student with a broad introduction to community health and the role of nursing within this context. Students will experience independence and collaboration with community-based clinicians in a variety of settings. Students will have opportunities to apply epidemiology; health promotion and disease prevention within groups; individual and family case management; community assessment and intervention; environmental hazards; and factors influencing the delivery of and access to community health services at the individual, family, and aggregate levels.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1128

NUR 1131 - INTERPROFESSIONAL HEALTHCARE TEAMS

Minimum Credits: 1
Maximum Credits: 2
This course provides a review of interprofessional healthcare teams, barriers and facilitators, roles/responsibilities of various members of the healthcare team, and strategies that help to incorporate teams within a variety of healthcare settings. The student is guided through methods of team development in healthcare organizations. The course provides a basis for incorporating nursing as an integral member of the healthcare team.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Requirements: School of Nursing students only.

NUR 1134 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE

Minimum Credits: 2
Maximum Credits: 2
Students synthesize knowledge about the professional nursing roles and increase their understanding of their responsibility and accountability for the nursing care of individuals, families and aggregates. Theory related to professional nursing roles, patient care management, and leadership is presented. In addition, health care policy related to specific nursing issues is examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (NUR 1120 or 1220) and (NUR 1050 or 1250) and (NUR 1060 or 1260) and (NUR 1052 or 1252)

NUR 1134C - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL

Minimum Credits: 6
Maximum Credits: 6
This course is designed to facilitate the transition into professional practice through preceptorship with registered nurses in a variety of settings. Students synthesize knowledge about the professional nursing roles and increase their responsibility and accountability for the nursing care of individuals, families and aggregates. Theory related to professional nursing roles, patient care management, and leadership is presented. In addition, health care policy related to specific nursing issues is examined.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1134; PREQ: 1054C

NUR 1135 - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL

Minimum Credits: 4.5
Maximum Credits: 4.5
This course is designed to facilitate the transition into professional practice through preceptorship with registered nurses in a variety of settings. Students synthesize knowledge about the professional nursing roles and increase their responsibility and accountability for the nursing care of individuals, families and aggregates. Theory related to professional nursing roles, patient care management, and leadership is presented. In addition, health care policy related to specific nursing issues is examined.

Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1134; PLAN: BSN

NUR 1136 - HIMALAYAN WILDERNESS FIRST RESPONDER

Minimum Credits: 6
Maximum Credits: 6
This is an intensive Wilderness First Responder (WFR) course taught as the second course in a required, two-course sequence in the Pitt/Hanifl Summer Program (May through June) addressing health, medicine, and the environment in the Himalayas of North India. WFR is the standard training in the United States for guides, international leaders, and backcountry travelers. The course assumes that access to advanced medical care is hours to days away from the point of injury or illness, and as a result, the responder must focus on patient assessment, long-term, and improvised patient care. The Pitt/Hanifl WFR course will not only emphasize care in remote, international settings, but also augment didactic and scenario learning with clinical visits and observations at Landour Community Hospital (LCH) and its surrounding communities, where students will shadow LCH and Aerie staff, as they care for patients.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: Must have completed Freshmen year

NUR 1136IS - HIMALAYAN WILDERNESS FIRST RESPONDER - IN-STATE

Minimum Credits: 0
Maximum Credits: 0
This is an intensive Wilderness First Responder (WFR) course taught as the second course in a required, two-course sequence in the Pitt/Hanifl Summer Program (May through June) addressing health, medicine, and the environment in the Himalayas of North India. WFR is the standard training in the United States for guides, international leaders, and backcountry travelers. The course assumes that access to advanced medical care is hours to days away from the point of injury or illness, and as a result, the responder must focus on patient assessment, long-term, and improvised patient care. The Pitt/Hanifl WFR course will not only emphasize care in remote, international settings, but also augment didactic and scenario learning with clinical visits and observations at Landour Community Hospital (LCH) and its surrounding communities, where students will shadow LCH and Aerie staff, as they care for patients.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Non-Graded Component

NUR 1136OS - HIMALAYAN WILDERNESS FIRST RESPONDER - OUT-OF-STATE

Minimum Credits: 0
Maximum Credits: 0
This is an intensive Wilderness First Responder (WFR) course taught as the second course in a required, two-course sequence in the Pitt/Hanifl Summer Program (May through June) addressing health, medicine, and the environment in the Himalayas of North India. WFR is the standard training in the United States for guides, international leaders, and backcountry travelers. The course assumes that access to advanced medical care is hours to days away from the point of injury or illness, and as a result, the responder must focus on patient assessment, long-term, and improvised patient care. The Pitt/Hanifl WFR course will not only emphasize care in remote, international settings, but also augment didactic and scenario learning with clinical visits and observations at Landour Community Hospital (LCH) and its surrounding communities, where students will shadow LCH and Aerie staff, as they care for patients.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Non-Graded Component

NUR 1138 - COMMUNITY HEALTH NURSING CLINICAL

Minimum Credits: 2
Maximum Credits: 2
The overall objective of this course is to provide the student with a broad introduction to community health and the role of nursing within this context. Students will experience independence and collaboration with community-based clinicians in a variety of settings. Students will have opportunities to apply epidemiology; health promotion and disease prevention within groups; individual and family case management; community assessment and intervention; environmental hazards; and factors influencing the delivery of and access to community health services at the individual, family, and aggregate levels.
Academic Career: Undergraduate
Course Component: Clinical

Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1128; PLAN: BSN

NUR 1140 - COMPARATIVE HEALTH ISSUES: TRENDS WITHIN HEALTH CARE SYSTEMS (GLOBAL SEMINAR IN BUENOS AIRES)

Minimum Credits: 3
Maximum Credits: 3
Provides students with the opportunity to apply concepts and tools acquired in BUSSPP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-U.S. environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environment and practices abroad are compared to those in the U.S. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in Germany under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: Nursing
Course Attributes: Study Abroad

NUR 1140IS - COMPARATIVE HEALTH ISSUES: TRENDS IN HEALTH CARE SYSTEMS (GLOBAL SEMINAR IN BUENOS AIRES) - IN-STATE

Minimum Credits: 0
Maximum Credits: 0
Provides students with the opportunity to apply concepts and tools acquired in BUSSPP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-U.S. environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environment and practices abroad are compared to those in the U.S. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in Germany under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: No Grade Required

NUR 1140OS - COMPARATIVE HEALTH ISSUES:TRENDS IN HEALTH CARE SYSTEMS(GLOBAL SEMINAR IN BUENOS AIRES)-OUT-OF-STATE

Minimum Credits: 0
Maximum Credits: 0
Provides students with the opportunity to apply concepts and tools acquired in BUSSPP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-U.S. environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environment and practices abroad are compared to those in the U.S. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in Germany under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: No Grade Required

NUR 1141 - HEALTH DISPARITIES IN VULNERABLE POPULATIONS AND ETHNIC CULTURAL GROUPS

Minimum Credits: 2
Maximum Credits: 2
The primary focus of this course is to explore a set of major health disparities affecting diverse racial and ethnic groups (Black or African American, Asian American, Native American, Hispanic or Latinos, American Indian or Alaska Natives and White) living in urban, suburban, and rural settings. Students will learn about the specific health conditions affecting each group, social justice and environmental justice issues affecting their health, and stress-related issues whether it be military, community violence or community environmental issues locally or in the state. The course is designed for undergraduate juniors and seniors and honor students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Nursing (BSN)

NUR 1142 - PROFESSIONAL ISSUES IN ADVANCED PRACTICE NURSING: NURSE ANESTHESIA

Minimum Credits: 2
Maximum Credits: 2
This course is designed to provide the undergraduate nursing student with an understanding of the role of the nurse anesthetist as an advanced practice nurse. Emphasis will be placed on exploring 1) the advanced practice role as a nurse anesthetist, 2) health care policies affecting nurse anesthesia practice, and 3) evidence based practice in nurse anesthesia practice. Students will describe the opportunities and barriers for nurse anesthetists in a variety of practice settings. Students will also explore the implications of health care policies at the national, state and local level on practice.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 1120; PROG: Nursing; GPA: 3.5
Course Attributes: University Honors Course

NUR 1143 - FOUNDATIONS OF PERSONALIZED HEALTH: TRANSLATION FROM BASIC RESEARCH TO CLINICAL PRACTICE

Minimum Credits: 2
Maximum Credits: 2
This course is designed to provide the undergraduate nursing student with a Foundation in Personalized Health Care and to introduce students to many facets of this emerging field. Emphasis will be placed on exploring 1) nursing implications of personalized and precision health care, 2) ethical issues of importance to the field of nursing, 3) next generation methods to tailor precise and personalized treatments, and 4) evidence-based interventions in personalized health care. Students will immerse themselves in the clinical settings and research areas related to personalized health care. Student will explore the implementations of personalized health care, a predictive, preventive, and patient-centered approach treatment.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

NUR 1150 - NURSING IN NICARAGUA: PUBLIC AND COMMUNITY HEALTH

Minimum Credits: 3
Maximum Credits: 3
Students broaden their global health perspective in this two-week immersion program by learning first-hand how a developing country's approach to public and community health compares to that of the United States. Students visit the Nicaraguan World Health Organization office, Ministry of Health, UPOLI University, rural and urban community health centers, and attend local cultural events. In addition, students partner with local nursing students to observe family assessments in the home, plan a health promotion event for community members, and have opportunities to give back through service.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 0082 and NUR 0082C or 1282C
Course Attributes: Study Abroad

NUR 1154 - NURSING CARE OF OLDER ADULTS

Minimum Credits: 2
Maximum Credits: 2
This course is designed to ensure competency in providing evidence-based nursing care to older adults and their families, across a continuum of health care settings. Attention is given to the complex interaction of acute and chronic co-morbid conditions, interdisciplinary collaboration, the recognition of risk factors, valid and reliable health assessments, and individualized care for older adults in acute and skilled nursing facilities. The influence of attitudes, age, gender, race, culture, religion, language, lifestyle, technology, and health care policy on the biological, psychological, and social functioning of older adults is considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

NUR 1212 - INTRODUCTION TO HEALTHCARE FINANCE AND POLICY

Minimum Credits: 0.5
Maximum Credits: 0.5
The aim of this course is to provide students with an overview of the healthcare financing system in the United States as well as key issues in healthcare policy. The course will focus on providing students with a basic introduction to: 1.) the health insurance system in the United States, 2) theoretical, conceptual, and philosophical basis of healthcare policy making, 3) the role of public policy in the finance and provision of healthcare in the United States, and 4) the process through which multiple branches of government create and implement policy. We will reference literature from

economics, political science, nursing, and health services research throughout the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Class restricted for ACLBSN School of Nursing Undergraduates

NUR 1220C - ADVANCED NURSING MANAGEMENT OF THE ADULT WITH ACUTE/COMPLEX HEALTH PROBLEMS CLINICAL

Minimum Credits: 2
Maximum Credits: 2
This clinical course focuses on the nursing care of adults with acute and complex illnesses in a hospital setting. Emphasis is placed on using the nursing process to assist students with the development of priority nursing goals and in applying critical thinking skills to patient care. The clinical nursing responsibilities include interpretation of diagnostic studies, medical/surgical patient management, evaluation of outcomes, health promotion, and support for individuals and families experiencing acute and complex health problems. This course includes application of cultural diversity awareness training to the nursing process. Clinical learning is focused on developing and refining the knowledge and skills to manage patient care as part of inter-professional teams. Clinical experiences are offered in acute care, critical care, and monitored units.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1120

NUR 1221C - ADVANCED CLINICAL PROBLEM SOLVING CLINICAL

Minimum Credits: 1
Maximum Credits: 1
This course focuses on the nursing management of the adult who experiences an acute or complex illness with an alteration in multiple body systems. The students' ability to apply the nursing process, using critical thinking skills, is expanded through clinical activities. Collaboration with interdisciplinary health professionals in health promotion and restoration is fostered.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1121

NUR 1228C - COMMUNITY HEALTH NURSING CLINICAL

Minimum Credits: 0.5
Maximum Credits: 0.5
The overall objective of this course is to provide the student with a broad introduction to community health and the role of nursing within this context. Students will experience independence and collaboration with community-based clinicians in a variety of settings. Students will have opportunities to apply epidemiology; health promotion and disease prevention within groups; individual and family case management; community assessment and intervention; environmental hazards; and factors influencing the delivery of and access to community health services at the individual, family, and aggregate levels.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1128

NUR 1234C - TRANSITION INTO PROFESSIONAL NURSING PRACTICE CLINICAL

Minimum Credits: 3
Maximum Credits: 3
This course is designed to facilitate the transition into professional practice through the preceptorship with registered nurses in a variety of settings. Students synthesize knowledge about the professional nursing roles and increase their responsibility and accountability for the nursing care of individuals, families and aggregates.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1134

NUR 1250C - NURSING CARE OF MOTHERS, NEWBORNS AND FAMILIES CLINICAL

Minimum Credits: 1
Maximum Credits: 1
This course provides an introduction to the process of childbirth and the dynamics of the childbearing family. It explores the areas of health promotion, physiologic changes associated with pregnancy, high risk conditions associated with pregnancy and the development of the fetus and newborn. Emphasis is on adaptation to the biopsychosocial needs of the childbearing family with sensitivity to the cultural needs and ethical issues of a diverse population. Critical thinking, problem solving, stress adaptation, role, family and nursing theories provide a major focus for understanding childbearing. Clinical experiences reflect a diversity of settings including outpatient, inpatient, and community programs that provide services to the childbearing family.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1050

NUR 1252C - NURSING CARE OF CHILDREN AND THEIR FAMILIES CLINICAL

Minimum Credits: 1
Maximum Credits: 1
This course focuses on nursing practice for restoration and maintenance of health in children in various stages of development within their families and the broader social contexts in which children grow and develop. Nursing approaches used in the clinical setting are based on the use of best evidence, developmental perspectives, and cultural competence. The nursing process is applied to the child and family to minimize the effects of stressors which have resulted in a disruption of health. There is an emphasis on critical thinking and decision making as the student applies theory to nursing care.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1052

NUR 1260C - NURSING CARE OF CLIENTS WITH PSYCHIATRIC MENTAL HEALTH PROBLEMS CLINICAL

Minimum Credits: 1.5
Maximum Credits: 1.5
This course focuses on nursing practice of health promotion and restoration in individuals with mental health problems. Application of theoretical concepts and nursing interventions is the focus of the clinical experience in acute, chronic, and community mental health settings. Emphasis is placed on understanding the unique contributions of social and cultural factors in the development of treatment plans for clients experiencing psychiatric problems.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 1060

NUR 1281 - FOUNDATIONS OF NURSING PRACTICE 1

Minimum Credits: 3.5
Maximum Credits: 3.5
This course focuses on theory acquisition and skills application in communication, therapeutic intervention, and clinical reasoning. Techniques of assessment, analysis, intervention, and planning of the physical, psychological, and developmental dimensions of the individual are explored through a variety of learning strategies. Variations of expected findings based on influences such as age, social condition, and culture are discussed. Emphasis is placed on the therapeutic interventions of safety, hygiene, comfort, health promotion, and safe performance of psychomotor skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 0082 and NUR 1282C

NUR 1282 - NURSING MANAGEMENT OF THE ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS

Minimum Credits: 6
Maximum Credits: 6
This course focuses on the nursing care of hospitalized adults with acute and/or chronic illnesses. Students will be guided in critical thinking exercises and the use of therapeutic interventions and research findings in the management of hospitalized adults. During laboratory sessions, students will have the opportunity to practice simulated clinical skills. Nursing process, critical thinking, and decision-making serve as the framework for acquisition of clinical psychomotor skills. Students will have clinical experiences with in-patients who require medical and/or surgical treatments and who are not experiencing a complicated illness course. Common concepts of care and common problems encountered in the care of ill adults and

elderly clients will be emphasized, including societal and cultural influences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 0066 and 0087 and 1281

NUR 1282C - NURSING MANAGEMENT OF ADULT WITH ACUTE/CHRONIC HEALTH PROBLEMS CLINICAL

Minimum Credits: 3.5
Maximum Credits: 3.5
This course focuses on the nursing care of adults, including older adults, with acute and/or chronic illnesses. Students will be guided in critical thinking exercises and the use of therapeutic interventions and research findings in the management of adults with acute and/or chronic illnesses. During clinic, students will have the opportunity to practice clinical skills learned in the lab. Nursing process, critical thinking, and decision-making serve as the framework for acquisition of clinical psychomotor skills. Common concepts of care will be emphasized, including societal and cultural influences.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: CREQ: NUR 0082 and NUR 0087 and NUR 1281

NUR 1477 - SCHOOL NURSE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course is designed to prepare the professional nurse for certification as a school nurse in Pennsylvania. The role of the school nurse is explored through the historical, legal, ethical, research and practice perspectives. The biological, physical, developmental, behavioral, cultural and psychosocial needs of children of all ages in the school setting are examined. Throughout the course, current evidence related to school nursing and Pennsylvania educational requirements is applied to the health needs of school age children, including those with special health and learning needs, the culturally diverse and English language learners (ELL's). The independent and collaborative aspects of the school nurse role are explored.
Academic Career: UGRD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: NUR 1078
Course Attributes: Distance Education

NUR 1630 - HEALTH CARE DELIVERY IN THE UNITED KINGDOM

Minimum Credits: 2
Maximum Credits: 2
This course is designed to provide the undergraduate nursing student with exposure to the culture and health care delivery system in a foreign country. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health care delivery and utilization, and the achievement of health-related goals in the united kingdom. Students will compare the health care systems, nursing education and nursing practice in the united kingdom and the united states.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: NUR 1060 and 1120 and 1900; PROG: School of Nursing

NUR 1631 - HEALTH CARE DELIVERY IN SWITZERLAND

Minimum Credits: 2
Maximum Credits: 2
This course is designed to provide the undergraduate nursing student with exposure to the culture and health care delivery system in a foreign country. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health care delivery and utilization, and the achievement of health-related goals in Switzerland. Students will compare the health care systems, nursing education and nursing practice in Switzerland and the united states.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Attributes: Pitt Class

NUR 1632 - HEALTH CARE DELIVERY IN ITALY

Minimum Credits: 2
Maximum Credits: 2
This course is designed to provide the undergraduate nursing student with exposure to the culture and health care delivery system in a foreign country. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health care delivery and utilization, and the achievement of health-related goals in Italy. Students will compare the health care systems, nursing education and nursing practice in Italy and the United States. They will identify national and international health-related organizations in Italy and the mission of and roles these institutions play.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Attributes: Pitt Class

NUR 1633 - HEALTH CARE DELIVERY IN CAMBODIA

Minimum Credits: 1
Maximum Credits: 3
This course is designed to provide the undergraduate nursing student with exposure to the culture and health care delivery system in a foreign country. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health care delivery and utilization, and the achievement of health-related goals in Cambodia. Students will compare the health care systems, nursing education and nursing practice in Cambodia and the united states.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: H/S/U Basis
Course Requirements: PREQ: NUR 1900; PROG: School of Nursing

NUR 1634 - HEALTH CARE DELIVERY IN OMAN

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide the undergraduate nursing student with exposure to the culture and health care delivery system in a foreign country. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health care delivery and utilization, and the achievement of health-related goals in Oman. Students will compare the health care systems, nursing education and nursing practice in Oman and the united states.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PREQ: (NUR 1765) or (HRS 1017); CREQ: NUR 1829; PROG: School of Nursing
Course Attributes: Pitt Class

NUR 1636 - HEALTH CARE DELIVERY IN CHINA

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide the undergraduate nursing student with exposure to the culture and health care delivery system in a foreign country. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health care delivery and utilization, and the achievement of health-related goals in china. Students will compare the health care systems, nursing education and nursing practice in China and the united states.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 1900
Course Attributes: Pitt Class

NUR 1637 - HEALTH CARE DELIVERY IN THAILAND

Minimum Credits: 1
Maximum Credits: 3
This course is designed to provide the undergraduate nursing student with exposure to the culture and health care delivery system in a foreign country. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health care delivery and utilization, and the achievement of health-related goals in Thailand. Students will compare the health care systems, nursing education and nursing

practice in Thailand and the united states.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: NUR 1900; PROG: School of Nursing
Course Attributes: Pitt Class

NUR 1639 - HEALTH CARE DELIVERY AT SAINT REGIS MOHAWK

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide the undergraduate (nursing) student with exposure to an American Indian and Alaska Native (AI/AN) culture and health care delivery system. Emphasis will be placed on exploring health issues and risk factors, the impact of cultural characteristics on health disparity, health outcomes, and health care delivery and utilization, and the achievement of health-related goals.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NUR 1640 - LEADERSHIP IN MILITARY NURSING

Minimum Credits: 3
Maximum Credits: 3
This elective course is designed to enhance nurse cadets' leadership ability and technical competence. This course has two components: leadership training and precepted clinical experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: H/S/U Basis
Course Requirements: School of Nursing students only.

NUR 1680 - INTRODUCTION TO GENETICS AND MOLECULAR THERAPEUTICS

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course that focuses on the fundamentals of genetics. The course is designed to give the student a basic understanding of genetic concepts so that this knowledge can be utilized to understand current and future genetic theories and therapeutics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NUR 1710 - APPLIED ADULT CARDIOPULMONARY CRITICAL CARE

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide students with the opportunity to synthesize and apply concepts related to the cardiopulmonary assessment and multidisciplinary management of critically ill adults. Through the use of presentations and laboratory sessions, the student will explore the pathophysiologic basis of critical cardiopulmonary instability, physical and technologic assessment parameters, and treatment modalities commonly utilized in the care of these patients in the intensive care unit. Interactive laboratory demonstration of vasoactive drugs, arterial, central venous and pulmonary artery monitoring, artificial airways, mechanical ventilation and rhythm strip interpretation will be provided. Critical clinical decision making and nursing responsibilities specific to dysrhythmia interpretation are addressed, including institution of appropriate immediate nursing intervention, pharmacological, and electrical therapeutic interventions based on advanced cardiac life support (ACLS) algorithms. Further, students will have the opportunity to synthesize and apply this information within patient care scenarios of respiratory and cardiac instability.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUR 1120; PROG: School of Nursing

NUR 1765 - RISK FACTORS AND HEALTH

Minimum Credits: 3
Maximum Credits: 3
The overall objective of this course is to provide the student with a broad description of risk factors and health promotion for individuals, families and communities. Current federal, state and professional organization guidelines and recommendations for health promotion and disease prevention

are applied. Current research on the efficiency of health promotion activities is presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NUR 1767 - RISK FACTORS AND HEALTH: A GLOBAL PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
The overall objective of this course is to provide the student with a broad description of risk factors and health promotion for individuals, families and communities from a global perspective. Students select a country of interest and apply that country's government, policy and professional organization guidelines and recommendations for health promotion and disease prevention. Current evidence on the efficacy of health promotion activities is studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: NUR 1765

NUR 1770 - NURSING CARE OF ADULT EXPERIENCING CARDIAC DYSRHYTHMIAS

Minimum Credits: 2
Maximum Credits: 2
Course is focused on interpretation and management of cardiac dys rhythmias occurring in the adult. Mastery of cardiac rhythm interpretation is the end goal. Critical clinical decision making and nursing responsibilities specific to dysrhythmias interpreted are addressed, including institution of appropriate pharmacological and electrical therapeutic interventions based on ACLS algorithms. Information on basis of electro-physiology, dysrhythmias etiologies and electrocardiographic monitoring is provided. Case studies and multiple examples are used to support repetitive practice in rhythm interpretation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: School of Nursing students only.

NUR 1829 - CONTEM ISSUES CROSS CULTL HEALTH

Minimum Credits: 3
Maximum Credits: 3
Purpose of course is to increase awareness of how delivery and acceptance of health care may be influenced by social, cultural, and environmental factors. It will provide an overview of how these factors influence a person's response to stressors, daily health and living needs. Goal is to help students increase their understanding of culturally congruent care by utilizing cultural concepts, theories, and research. Students will analyze factors that facilitate/ hinder communication about health needs, acceptance of the health care regimen, and access to health care systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Global Studies

NUR 1900 - GLOBAL HEALTH CARE

Minimum Credits: 2
Maximum Credits: 2
Cultural competence and embracing diversity are central values for healthcare professionals. In light of the globalization of society, knowledge of differing perspective, traditions, religions, politics, cultures, and health practices is crucial to providing quality healthcare. This course is designed to introduce students to concepts necessary to understand healthcare from a global perspective, to broaden their views of a global society, and to examine their roles within a global community. This course will also introduce students to current school of nursing study abroad programs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: NUR 0080 and (0087 or 1110)

NUR 1990 - SENIOR SEMINAR

Minimum Credits: 1
Maximum Credits: 1

The goal of this course is to support the senior student's successful progression to entry-level professional nursing practice. Classroom activities and self-directed learning will prepare students to attain the benchmarks associated with professional licensure and provide a foundation for the continuous self-evaluation and life-long learning required to support professional nursing practice (AACN, 2008).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: H/S/U Basis
Course Requirements: PREQ 1121 or 1134 and CREQ 1121 or 1134; LVL: Sr; PROG: School of Nursing (UNURS)

NUR 2000 - RESEARCH FOR EVIDENCE-BASED PRACTICE 1

Minimum Credits: 2
Maximum Credits: 2
This course examines the interaction of theory, research, and clinical expertise in the development of evidence-based nursing practice. Students develop the skills needed to identify relevant research and to critically appraise published studies to evaluate their quality and applicability to clinical practice. Students gain an understanding of the research process, the critical appraisal of published research studies that use a variety of research designs, and the role of research in evidence-based practice.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: CREQ: NUR 2011 or NUR 2211 or NUR 2411

NUR 2004 - PATHPHYLGY ACROSS LIFE SPAN

Minimum Credits: 4
Maximum Credits: 4
This course is designed to provide the student with a comprehensive theoretical foundation of the phenomena that produce alterations in human physiologic function in diverse populations across the life span. Information gained in this course will prepare the student for subsequent courses related to the diagnosis and management of disease processes associated with pathophysiologic dysfunction/alterations in people of various ethnic/cultural groups across the lifespan.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: School of Nursing students only.

NUR 2010 - HEALTH PROMO/DISEASE PRVNTN

Minimum Credits: 3
Maximum Credits: 3
Health promotion and disease prevention are examined from theoretical foundations to clinical applications. The course focuses on individual and community health promotion assessment, screening, and interventions in diverse populations. Epidemiological principles and real clinical examples are discussed as a basis for focusing health promotion assessment and interventions. Course topics are delineated according to health people 2010 goals with a corresponding focus on factors related to health care disparities among vulnerable populations. Current research in health promotion and disease prevention is the basis for identifying appropriate interventions in diverse populations and settings.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LG/SU3 Basis
Course Requirements: School of Nursing students only.

NUR 2011 - APPLIED STATISTICS FOR EBP

Minimum Credits: 3
Maximum Credits: 3
This course will provide students with the basis for understanding and interpreting commonly used statistical tests, as well as critically appraising their use in published research studies. Content will include descriptive and inferential statistics commonly reported in published research studies including both univariate and multivariate parametric and nonparametric tests. The course will also cover meta-analytic techniques and students will learn to calculate effect sizes.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LG/SU3 Basis
Course Requirements: School of Nursing students only.

NUR 2031 - DIAGC PHYSCL EXAM LIFE SPAN

Minimum Credits: 3
Maximum Credits: 3
This didactic course focuses on the use of the diagnostic history and physical examination to formulate a health assessment in patient populations across the lifespan. Concentration is on selected theories, principles and techniques from the physical and behavioral sciences essential to obtaining a complete health history and performing a methodical physical examination on patients across the life span.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad Letter Grade
Course Requirements: PREQ: NUR 2004 or NUR 2204 or NUR 2404; PLAN: NURSAN-MSN or NURSAN-DNP; SUBPLAN: MSNNNP or DNPNNP or DNPFLNP or DNPPPNP or MSNCNL or DNPMSN or DNPAGAC or DNPNA or ODNPNA or MSNADM or OCNL or ONAD or DNPAGNP-SP or DNPPCNP or DNPAGCN or DNPPMHN

NUR 2044 - NUR GRAD ORIENTATION MODULE

Minimum Credits: 0
Maximum Credits: 0
This module provides a web-based graduate nursing orientation that is designed to provide graduate nursing students with an overview of the school of nursing and information that they will need to successfully complete their programs and achieve their career goals.
Academic Career: GRAD
Course Component: Independent Study
Grade Component: Grad HSU Basis
Course Requirements: School of Nursing students only.

NUR 2061 - ORGANIZTNL & MANAGEMENT THEORY

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the organization and management, particularly of nursing personnel, in health services organizations. Organizational theories, their analysis, and their application to health care services systems will be explored. Management theories will also be discussed. Emphasis will be placed on personnel management aspects relevant to nursing such as licensure, certification, advance practice, nurse extender, etc.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LG/SU3 Basis
Course Requirements: School of Nursing students only.

NUR 2680 - INTRO GENETCS & MOLEC THERPUTC

Minimum Credits: 3
Maximum Credits: 3
This introductory course focuses on the fundamentals of human and molecular genetics. It is designed to give students a basic understanding of genetic concepts and molecular techniques so that this knowledge can be applied to current and future genetic diagnoses and therapies encountered in nursing.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad Letter Grade

NURSP 2061 - ORGANIZTNL & MANAGEMENT THEORY

Minimum Credits: 3
Maximum Credits: 3
This graduate level course focuses on organizational, leadership, and management theories and how they apply to health service organizations, both today and in the future. Emphasis will be placed on leading the clinical discipline of nursing based on organizational and systems thinking as well as relevant political and cultural perspectives. Quality and performance improvement strategies, as well as creating and sustaining appropriate levels of change, are explored in order to facilitate the ability to create safe and effective care delivery environments.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LG/SU3 Basis
Course Requirements: School of Nursing students only.

NURSP 2092 - LEADERSHIP DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the application of leadership theory and the development of critical leadership skills necessary for success in today's health care environment. The course is based on five essential competencies for nursing leadership: professionalism, business skills and principles, knowledge of the health care environment, communication and relationship management, and transformational leadership.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Grad LGSNC
Course Requirements: School of Nursing students only.

Nutrition

NUTR 1006 - INTRO TO HUMAN NUTRITION

Minimum Credits: 3
Maximum Credits: 3
This course will cover an overview of the scientific principles of nutrition and application of these principles to humans throughout the life cycle. Major focuses of the course are the classification and function of the six major nutrients, review of current nutrition standards, safety of the food supply, and nutrition misinformation. This course is meant for nutrition majors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NUTR 1600 - INTRODUCTION TO DIETETICS

Minimum Credits: 2
Maximum Credits: 2
This is an introduction to the profession of dietetics. Emphasis will be placed on the scope of the profession of dietetics practice, the role and functions of registered dietitian nutritionists, and the education requirements for entry into practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Health and Rehabilitation Sciences students only.

NUTR 1602 - NUTRITION ASSESSMENT

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the rationale for and the use of a variety of standards used in assessing and planning the quality and quantity of the food and nutrient intake of individuals and groups. It will include in-depth study and application of commonly used reference standards and tools used for evaluating levels and proportions of macronutrients, micronutrients and various dietary food components. Assessment of health indicators in individuals and populations will also be addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: NS-BS, NS-BS (NSNSMS-TR), ND-MS (NSBS-TR)

NUTR 1603 - NUTRITION ASSESSMENT 2

Minimum Credits: 3
Maximum Credits: 3
Introduction to professional practice methods and skills in nutrition focused physical examination. Learning experiences will include formal class presentations, class discussions, case-based problem solving and skill development laboratory sessions. Knowledge based learning leading to examination technique simulations for anthropometric measurements for body composition, nutrition focused physical examination for malnutrition diagnosing and examination techniques, e.g., vital signs, head and neck exam, intra and extra-oral exams, heart and lung auscultation, as well as, abdominal auscultation and palpation are included. At the completion of the course competency in application of nutrition focused physical examination techniques will be assessed on an individual basis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition (BS, BPH, BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND)

NUTR 1604 - FOOD SERVICE MANAGEMENT WITH LAB

Minimum Credits: 3
Maximum Credits: 3
This course presents the basic principles and skills of food service management and leadership. Learning experiences include lectures, discussions, and required field trips. Please note, no other courses can be scheduled during the break between the morning and afternoon class sessions as this time will be needed for travel to field trips sites.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition (BS, BPH, BS-H) or Nutrition Science (NS-BS) or Clinical Dietetics - Nutrition (NDNUTR-ND)

NUTR 1605 - PRINCIPLES OF NUTRITION EDUCATION

Minimum Credits: 3
Maximum Credits: 3
Concepts and components of the teaching-learning process and their application in the dietetics practice. Experience in the instructional planning and implementation functions of clinical dietitians is emphasized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition (BS, BPH, BS-H) or Nutrition Science (NS-BS) or Clinical Dietetics - Nutrition (NDNUTR-ND)

NUTR 1608 - PROFESSIONAL TRENDS AND ISSUES

Minimum Credits: 3
Maximum Credits: 3
Identification and discussion of critical issues pertaining to the profession of dietetics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition (BS, BPH, BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND)

NUTR 1609 - CLINICAL BIOCHEMISTRY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the basic concepts of biochemistry. The structures and function of the major biomolecules, carbohydrates, lipids, proteins and nucleic acids will be discussed and their metabolism integrated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition (BS, BPH, BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND)

NUTR 1610 - FOOD APPLICATION

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course emphasizing the chemical and physical properties of food in relation to its selection, quality, and preparation. Experience in the construction, modification and preparation of recipes to meet various dietary needs is also provided.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: NUTR 1602; PLAN: Nutrition and Dietetics (BPH; BS; BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND) or (NS-BS)

NUTR 1612 - FOOD AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
Introduction to ethnic influence on the diversity of American food patterns. Social, cultural, economic, geographic, and religious factors are considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Nutrition and Dietetics (BPH; BS; BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND) or (NS-BS)

NUTR 1613 - FOOD APPLICATION LAB

Minimum Credits: 1
Maximum Credits: 1
Study of the chemical and physical changes that occur in food as a result of various food preparation methods and their effects on nutrient quality. Experience in the construction, modification and preparation of recipes to meet various dietary needs is also provided.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PREQ: NUTR 1602; PLAN: Nutrition and Dietetics (BPH; BS; BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND) or (NS-BS)

NUTR 1614 - NUTRITION CRITICAL THINKING

Minimum Credits: 3
Maximum Credits: 3
An application of critical thinking skills to evaluate nutrition issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Clinical Dietetics-Nutrition (BS, BPH, BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND) or (NS-BS)

NUTR 1620 - NUTRIENT METABOLISM

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the basic concepts of biochemistry at the macro- and micro-level. At the macro-level, the structures and functions of the major biomolecules, carbohydrates, lipids, nucleic acids, and proteins will be discussed and their metabolism integrated. A similar approach will be directed at the micronutrients, vitamins, and minerals, which will be introduced with the macromolecules.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: NS-BS, NS-BS (NSNDMS-TR), ND-MS (NSBS-TR)

NUTR 1621 - MICRONUTRIENT METABOLISM

Minimum Credits: 3
Maximum Credits: 3
Second of a two-course sequence in advanced nutrition and metabolism. Emphasis is placed on the essential micronutrients.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Nutrition and Dietetics (BPH; BS; BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND)

NUTR 1622 - LIFE CYCLE NUTRITION

Minimum Credits: 3
Maximum Credits: 3
The study of the physiological, developmental, sociological, and environmental factors that affect nutrient requirements and recommendations at various stages of the life cycle.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PLAN: Nutrition and Dietetics (BPH; BS; BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND) or (NS-BS)

NUTR 1625 - NUTRITION THERAPY

Minimum Credits: 4
Maximum Credits: 4
This course will provide an introduction to medical nutrition therapy in the prevention and treatment of disease. The course will cover the nutrition implications, nutrition assessment process, and nutrition interventions for specific diseases. Teaching approaches for the course include lectures, assigned readings, in-class discussions, and problem-based learning through simulation/case studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: NS-BS and NDNUTR-ND

NUTR 1626 - PUBLIC HEALTH NUTRITION

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the application of nutrition knowledge to improve the health of populations through public health efforts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

NUTR 1628 - PRACTICAL EXPERIENCE

Minimum Credits: 2
Maximum Credits: 2
Supervised practical experience providing students with the oppertunity to gain real world experience related to nutrition science. This course is for Nutrition Science students only.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis

NUTR 1630 - NUTRITION THERAPY 1

Minimum Credits: 3
Maximum Credits: 3
The first of a two-course sequence which will provide an introduction to medical nutrition therapy in the treatment of acute and chronic diseases. The course will cover pathophysiology and treatment of specific diseases, nutrition implications of specific diseases, nutrition assessment, determination of nutrient requirements, and nutrition interventions including calculation of modified diets.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Nutrition and Dietetics (BPH; BS; BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND) or (NS-BS)

NUTR 1632 - NUTRITION THERAPY 2

Minimum Credits: 3
Maximum Credits: 3
The second of a two-course sequence which will provide an introduction to medical nutrition therapy in the treatment of acute and chronic diseases. The course will cover pathophysiology and treatment of specific diseases, nutrition implications of specific diseases, nutrition assessment, determination of nutrient requirements, and nutrition interventions including calculation of modified diets.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Nutrition and Dietetics (BPH; BS; BS-H) or Clinical Dietetics - Nutrition (NDNUTR-ND)

NUTR 1699 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Provides advanced students an opportunity to explore in depth an area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis
Course Requirements: School of Health and Rehabilitation Sciences students only.

Persian (Farsi)

PERS 0101 - PERSIAN (FARSI) 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 0102 - PERSIAN (FARSI) 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0421 or PERS 0101; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 0103 - PERSIAN (FARSI) 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0422 or PERS 0102; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 0104 - PERSIAN (FARSI) 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0423 or PERS 0103; MIN GRADE: 'C' FOR LISTED COURSES

Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 0105 - PERSIAN (FARSI) 5

Minimum Credits: 3
Maximum Credits: 3
This course will continue to focus on the development and integration of students' language skills at a more advanced level. It will also aim to broaden students' vocabulary to improve their spoken proficiency in a variety of communicative contexts and situations. At this level, students will read various texts and literary works from Persian poetry, then discuss and analyze each text and poetry to understand the meaning and to improve comprehension of advance level grammar forms and culture specific vocabulary. Because Persian language and culture are closely related to each other, students will read and extract details that will help them develop more in depth understanding of Persian culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0424 or PERS 0104; MIN GRADE 'C' FOR ALL LISTED COURSES
Course Attributes: Asian Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 0106 - PERSIAN (FARSI) 6

Minimum Credits: 3
Maximum Credits: 3
In this advanced course, students will integrate their language skills from all previous levels. At this level, students will identify an area of interest in Persian culture, gather sources to prepare discussion and analysis, and demonstrate advance levels of language comprehension.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PERS 0105; MIN GRADE 'C'
Course Attributes: Asian Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 0107 - PERSIAN (FARSI) 7

Minimum Credits: 3
Maximum Credits: 3
The main goal of this course is to improve students' oral communication skills to an advanced professional level, and to develop a deeper knowledge of the culture. Students will analyze and discuss, in detail, about various issues such as, politics, religion, social problems, and film. Much of the course will adapt to the areas of interest or field specialty of the students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PERS 0106; MIN GRADE 'C'
Course Attributes: Asian Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 0108 - PERSIAN (FARSI) 8

Minimum Credits: 3
Maximum Credits: 3
This course provides additional practice to help students achieve advanced linguistic fluency and accuracy. Students acquire mastery of speaking and pronunciation at a professional level through the use of authentic materials from various sources such as (Persian film, online Persian TV, internet radio, songs, newspapers, short stories, and more). The ultimate goal of this course is to improve their communication skills with fluency and accuracy and a more in depth understanding of Persian culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PERS 0107; MIN GRADE 'C'
Course Attributes: Asian Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

PERS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate

Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

PERS 1905 - UNDERGRADUATE TEACHING ASSISTANT IN PERSIAN (FARSI)

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

PERS 1909 - SPECIAL TOPICS IN PERSIAN (FARSI)

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Petroleum Engineering

PETE 1097 - SPECIAL PROJECTS

Minimum Credits: 1
Maximum Credits: 6
Student develops an individual project under supervision of a faculty member. Project may be experimental, design-oriented, or instructional. A written report is prepared.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

PETE 1160 - PETROLEUM RESERVOIR ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course covers the principles of reservoir engineering and material balance calculation in petroleum reservoirs. The topics include petroleum origin and oil occurrence and migration; oil , gas, and gas-condensate reservoirs; basic drilling of oil and gas wells; p-v-t behavior of natural gas; material balances in gas reservoirs; oil reservoirs under simultaneous dissolved gas drive, gas cap drive, and water drive; generalized material balance in petroleum reservoirs; basic equations for fluid flow in reservoirs, absolute, effective, and relative permeabilities; and a design project on reservoir calculations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0250 or 0290 or 1270 or 0202 or 1035; PROG: Swanson School of Engineering

PETE 1201 - RECOVERY OF OIL BY WATERFLOODING

Minimum Credits: 3
Maximum Credits: 3
Theory of immiscible fluid displacement starting with frontal advance theory and applying it to waterflooding, fluid patterns, sweep efficiency, stratified reservoirs, etc. Relative permeability experiments are simulated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

PETE 1204 - ENHANCED OIL RECOVERY PROCESSES

Minimum Credits: 3
Maximum Credits: 3

This course covers different topics on enhance oil recovery processes (co2, thermal, miscible fluids and surfactants); coal-bed methane, enhanced methane recovery, and underground coal gasification; surface and in-situ heavy oil, tar sand and oil shale production; and co2 capture, sequestration and disposal. The fundamentals, thermodynamics, reaction kinetics and transport phenomena as well as the environmental issues and regulations related to these topics are also covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

PETE 1205 - PETROLEUM PRODUCTION ENGINEERING

Minimum Credits: 3
Maximum Credits: 3
This course covers principles of oil and gas production from hydrocarbon-bearing formations. Topics include: flow through porous media of incompressible, compressible and slightly compressible fluids; reservoir, producing formation, vertical lift, and chock performances; principles of gas lift, gas lift valves and design; and sucker rod pumping design; and design project on artificial gas lift.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: MATH 0202 or 0250 or 0290 or 1035 or 1270; PROG: Swanson School of Engineering

PETE 1207 - PETROLEUM AND NATURAL GAS PROCESSING

Minimum Credits: 3
Maximum Credits: 3
The course covers different topics on natural gas, petroleum and petrochemical processing. The topics include natural gas cleanup, methane reforming for h2 production, partial oxidation of ch4 for synthesis gas production, and chemicals from methanol; refinery feed-stocks, crude distillation and refinery products, alkylation, hydrotreating, catalytic reforming and isomerization, catalytic cracking, resid, tar sands and oil shale processing; and methanol/other alcohols, ethylene, fertilizer, and plastic production plants.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

PETE 1208 - PETROLEUM DRILLING AND WELL COMPLETION

Minimum Credits: 3
Maximum Credits: 3
This course covers different topics related to drilling operations; directional drilling techniques; completion operations; and work-over operations. The drilling operations encompass drilling rig components, bit selection program, drilling fluid types, cementing program design and well control/safety. The directional drilling techniques include: well-path design/applications, downhole motor components, directional surveys, and logging while drilling. The well completion operations contain: formation evaluation tools, open-hole log interpretation, coring tools, flow testing, perforating, hydraulic fracturing and other stimulation techniques. The work-over operations comprise work-over rig components, cased hole log interpretation, plugs/packers/fishing tools, squeeze job design, casing integrity tests and stimulation evaluation. A special project on casing design is also included.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

PETE 1209 - HYDRAULIC FRACTURING MECHANICS AND APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
Course description: this class will prepare students to wisely and critically design hydraulic fracturing treatments as well as make informed recommendations to employers, governments, and communities about the risks and benefits of hydraulic fracturing methods. Upon completion of this course, students will be equipped to use engineering formulae to estimate hydraulic fracture dimensions, evaluate strengths and weaknesses of various modeling approaches, characterize subsurface conditions from wellbore pressure analysis, make sound recommendations for monitoring, and compare and contrast approaches and risks for a range of application domains.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: CHE 0300; PROG: Swanson School of Engineering

PETE 1211 - RESERVOIR SIMULATION

Minimum Credits: 3
Maximum Credits: 3
This course introduces the students to the simulation process of fluid flow in petroleum reservoirs. Governing equations required to describe fluid flow in porous media are derived, numerical techniques for solving the equations are introduced. Students will learn how reservoir flow simulators can be used in assessment studies of hydrocarbon reservoirs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: Swanson School of Engineering

PETE 1212 - CO2 FOR ENHANCED OIL RECOVERY AND FRACKING

Minimum Credits: 3
Maximum Credits: 3
This course will cover the physical properties of CO2 that make it an attractive solvent for enhanced oil recovery (EOR), the natural and anthropogenic sources of CO2, the types of fields that are suitable for CO2 EOR, and the mechanisms responsible for CO2 increasing oil recovery. The current status of CO2 EOR in the United States will also be reviewed, along with its potential for future expansion. The foremost technical challenges of CO2 EOR, namely mobility control and conformance control, will be discussed along with a current research efforts. The course will conclude with a brief review of how CO2 has been used as a hydraulic fracturing, whether as a pure fluid, as the gaseous component of foams, or as an energizing component.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Grad LG/SU3 Basis
Course Requirements: PREQ: CHE 0100 and 0200; PLAN: Chemical Engineering (BSE); PROG: Swanson School of Engineering

Pharmacy

PHARM 1095 - COMMUNITY CONNECTOR COURSE

Minimum Credits: 2
Maximum Credits: 2
This course is especially well-suited for students from SHRS, PHARM, NUR and School of Social Work. This seminar focuses on the patient population which is a high risk population who are vulnerable to frequent readmissions to the hospital. Emphasis will be placed on: 1) understanding this patient population, the health system and health behavior challenges associated with this population, and systematic needs associated with reducing their health care needs 2) The course will include presentations by researchers, clinicians, and healthcare industry experts. Students will need to be available for approximately 6, out-of-classroom activities during the semester. This course will expose students to the patient population through visits with clinicians at the hospital, home, and community, including in-home assessments, patient education sessions, and behavior change (motivational interviewing) techniques. Students may me paired with a nurse, speech language pathologist, occupational therapist, or physical therapist during one of these activities. Each out-of-classroom visit often requires a 4-hour block of time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Pharmacy students only.

Philosophy

PHIL 0010 - CONCEPTS OF HUMAN NATURE

Minimum Credits: 3
Maximum Credits: 3
An introduction to some ways in which ethical and social thought has been influenced by different views of human nature. Readings are from such authors as Plato, Hobbes, Rousseau, Marx, and Freud.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0012 - CONCEPTS HUMAN NATURE/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Concepts of Human Nature".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 0080 - INTRODUCTION TO PHILOSOPHICAL PROBLEMS

Minimum Credits: 3
Maximum Credits: 3
An introduction to some classical problems of philosophy. Topics vary, but might include skepticism, free will, the existence of god, and the justification of ethical beliefs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 0082 - INTRODUCTION PHILOSOPHICAL PROBLEM/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
An introduction to some classical problems of philosophy. Topics vary, but might include skepticism, free will, the existence of god, and the justification of ethical beliefs. Special writing component for PHIL 0080, "Introduction to Philosophical Problems".
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 0200 - HISTORY OF ANCIENT PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
The aim of this course is to introduce students to some of the main achievements and leading ideas of ancient Greek philosophy up to classical times. Emphasis will be on understanding and evaluating the arguments and ideas of the Greek philosophical tradition.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0202 - HISTORY ANCIENT PHILOSOPHY/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
The aim of this course is to introduce students to some of the main achievements and leading ideas of ancient Greek philosophy up to classical times. Emphasis will be on understanding and evaluating the arguments and ideas of the Greek philosophical tradition. Special writing component for PHIL 0200, "History of Ancient Philosophy".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Intensive Course (WRIT)

PHIL 0210 - HISTORY OF MODERN PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
An introduction to the philosophical period from Descartes through Kant. Special attention is given to at least one rationalist, one empiricist, and Kant.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0212 - HISTORY OF MODERN PHIOSOPHYL/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "History of Modern Philosophy".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 0220 - INTRODUCTION TO EXISTENTIALISM

Minimum Credits: 3
Maximum Credits: 3
This introductory level course explores the central existentialist question of how to be a genuine individual or self through reading of several major authors, such as pascal, Kierkegaard, Dostoievski, Nietzsche, and Sartre.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0222 - INTRODUCTION TO EXISTENTIALISM/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Introduction to Existentialism"; it includes extra emphasis on and credit for instruction in writing skills.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

PHIL 0230 - PHILOSOPHY AND FILM

Minimum Credits: 3
Maximum Credits: 3
This is an introductory aesthetics course dealing with philosophy and film.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 0275 - INTRODUCTION TO CHINESE PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PHIL 0300 - INTRODUCTION TO ETHICS

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course considering the question of one fundamental moral principle - right and wrong. The results are applied to moral problems of serious interest today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0302 - INTRODUCTION TO ETHICS/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Introduction to Ethics".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 0320 - SOCIAL PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
An introduction to some traditional philosophical perspectives on the nature of society. Philosophers studied might include Plato, Hobbes, Marx, and Twentieth-Century social theorists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0322 - SOCIAL PHILOSOPHY/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Social Philosophy".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 0330 - POLITICAL PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3

This introductory level undergraduate course studies several important views on the nature and justification of government, such as those of Plato, Hobbes, and Marx.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0332 - POLITICAL PHILOSOPHY/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Political Philosophy".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 0350 - PHILOSOPHY AND PUBLIC ISSUES

Minimum Credits: 3
Maximum Credits: 3
The aim of this introductory undergraduate course is to encourage systematic and clear thought about issues of public importance by philosophic reflection which emphasizes the implications of different moral and political theories for these issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0352 - PHILOSOPHY AND PUBLIC ISSUES/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Philosophy and Public Issues".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

PHIL 0360 - INTRODUCTION TO BIOMEDICAL ETHICS

Minimum Credits: 3
Maximum Credits: 3
This introductory level undergraduate course examines various ethical problems arising in medicine, such as euthanasia, abortion, and the allocation of resources.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0362 - INTRODUCTION TO BIOMEDICAL ETHICS CREDIT LABORATORY

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Introduction to Bioethics"
Academic Career: Undergraduate

Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

PHIL 0380 - WOMEN AND PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
Primary objectives will be to acquaint students with the history of the relation between women and philosophy in the Western tradition and to teach students to think and write clearly.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0440 - MINDS AND MACHINES

Minimum Credits: 3
Maximum Credits: 3
This introductory level course is devoted to explicating and critically evaluating the thesis that the human mind, or at least its cognitive faculty, can be understood as a computing machine. Readings are primarily from contemporary authors, and include both scientists and philosophers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0442 - MINDS AND MACHINES/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Minds and Machines".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

PHIL 0450 - THEORIES OF KNOWLEDGE & REALITY

Minimum Credits: 3
Maximum Credits: 3
This course gives a broad introduction to classic and contemporary work on central questions in metaphysics and epistemology. Central topics of concern will be the nature of reality and the possibility of knowledge. Along the way we will discuss skeptical arguments to the effect that knowledge of certain aspects of reality is impossible and classic and contemporary responses to them. We will also discuss a number of topics in metaphysics, which may include the nature of the self, time, the relationship between mind and body, the existence of god, and debates between materialists and idealists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0452 - THEORIES OF KNOWLEDGE & REALITY / WRIT LABORATORY

Minimum Credits: 4
Maximum Credits: 4
This writing laboratory is the special writing recitation for the lecture course "Theories of Knowledge & Reality".
Academic Career: Undergraduate

Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0460 - INTRODUCTION TO PHILOSOPHY OF MIND

Minimum Credits: 3
Maximum Credits: 3
This course gives a broad introduction to contemporary work on the philosophy of mind. It will primarily focus on the nature of consciousness, the mind-body problem, and may include how we know the minds of other human beings, the nature of personal identity over time, as well as discussion of the theory of action.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0462 - INTRODUCTION TO PHILOSOPHY OF MIND / WRIT LABORATORY

Minimum Credits: 4
Maximum Credits: 4
This writing laboratory is the special writing recitation for the lecture course "Introduction to Philosophy of Mind".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0470 - PHILOSOPHY OF RELIGION

Minimum Credits: 3
Maximum Credits: 3
A critical examination of the rationality of faith in the existence of god. Traditional arguments both for and against the existence of god are considered, along with pragmatic justifications of faith based upon its beneficial consequences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0472 - PHILOSOPHY OF RELIGION/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Philosophy of Religion".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

PHIL 0473 - PHILOSOPHY OF RELIGION

Minimum Credits: 3
Maximum Credits: 3
An examination of the arguments for and against the existence of god.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 0500 - INTRODUCTION TO LOGIC

Minimum Credits: 3
Maximum Credits: 3
An introduction to the concepts and methods of modern deductive logic. Propositional logic is emphasized, but quantificational logic is touched upon.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

PHIL 0510 - CAUSAL REASONING

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PHIL 0610 - PHILOSOPHY AND SCIENCE

Minimum Credits: 3
Maximum Credits: 3
An introductory course in philosophy of science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 0612 - PHILOSOPHY AND SCIENCE/WRITING PRACTICUM

Minimum Credits: 4
Maximum Credits: 4
This practicum is the special writing recitation for the lecture course "Philosophy and Science".
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., Writing Requirement Course

PHIL 0850 - PHILOSOPHY AND LIBERAL DEMOCRACY

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to several problems common to philosophers and politics and introduces students to the different theories, modes of argument, and techniques of analysis used by the two disciplines to understand them. It is intended to help students deepen their understanding of the dominant political stance of our society.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies, Writing Requirement Course

PHIL 1020 - PLATO

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course examining Plato's main views both in their historical context, and as they influence our own thinking today; the relations between Socrates and the sophists are also studied.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Any other Philosophy course.
Course Attributes: West European Studies

PHIL 1040 - ARISTOTLE

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course examining the basic concepts of Aristotle's metaphysics, physics, ethics and logic.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 1070 - TOPICS IN ANCIENT PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
An investigation of a particular topic or figure in the field of ancient philosophy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1110 - RATIONALISM

Minimum Credits: 3
Maximum Credits: 3
An examination, at the advanced undergraduate level, of several important rationalist philosophers, such as Hobbes, Descartes, Spinoza, and Leibniz.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: West European Studies

PHIL 1140 - EMPIRICISM

Minimum Credits: 3
Maximum Credits: 3
An examination, at the advanced undergraduate level, of several important empiricist philosophers, such as Bacon, Locke, Berkeley, Hume, and Reid.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: West European Studies

PHIL 1170 - KANT

Minimum Credits: 3
Maximum Credits: 3
An introduction to the philosophy of Kant, focusing on the "critique of pure reason". The course seeks to enable the advanced undergraduate to understand the theories and arguments of this revolutionary and rewarding work.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHIL 0210 or 0212 or PHIL 1110 or PHIL 1140 or permission of the instructor
Course Attributes: West European Studies

PHIL 1180 - 19TH CENTURY PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
A survey, at the advanced undergraduate level, of the thought and unity of the three great German philosophers of the nineteenth century; Hegel, Marx, and Nietzsche.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1183 - MARX

Minimum Credits: 3
Maximum Credits: 3
An examination of the philosophy of Marx and his place in the history of philosophy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 1200 - 20TH CENTURY ANALYTIC PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course examines major trends in contemporary analytic philosophy, including, for instance, some (but not all) of logical empiricism, logical positivism, Wittgenstein and his followers, ordinary language ("oxford") philosophy, Quine and his followers, Sellars and his followers, and so on.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Any other Philosophy course.

PHIL 1225 - WITTGENSTEIN

Minimum Credits: 3
Maximum Credits: 3
In depth study of some central sections of Wittgenstein's Philosophical Investigations. The objective will be not only to improve understanding of issues about language, mind, and reality raised in that brilliant but cryptic work, but also to situate the work historically in relation to Wittgenstein's earlier masterpiece Tractatus Logico-Philo sophicus; the analytic tradition in 20th century philosophy; and modern philosophy in general.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: West European Studies

PHIL 1240 - AMERICAN PRAGMATISM

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course in the "classical" American pragmatists, especially Pierce, James, Dewey, and Mead.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1290 - TOPICS IN HISTORY OF PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
Wittgenstein is perhaps the most important philosopher of the twentieth century. The Tractatus is the only philosophical work that Wittgenstein published in his lifetime, and it went on to become a foundational text in the analytic tradition. It was read line by line by members of "The Vienna

Circle" - a group of the leading philosophers, scientists and mathematicians of the early twentieth century - and it remains an inspirational, puzzling, and deeply controversial text. This course aims to give you the resources to begin to interpret the Tractatus for yourself. You will explore the rich historical and philosophical background of early analytic philosophy, and by doing so you will gain a critical understanding of some of the most central topics in philosophy today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 1300 - ETHICAL THEORY

Minimum Credits: 3
Maximum Credits: 3
An advanced undergraduate examination of various topics in ethical theory, such as ethical relativism, subjective and objective value, the relation of reason and ethics, ethical realism, utilitarianism and contractarianism, and virtues and vices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHIL 0300 or 0330 or 0332 or 0350 or any 1000 level Philosophy course.

PHIL 1310 - HISTORY OF ETHICS

Minimum Credits: 3
Maximum Credits: 3
An examination of some of the principal moral philosophers in one or more of the major historical periods from Homeric times to the present day--such as Plato, Aristotle, Aquinas, Hobbes, Hume, Kant, Nietzsche, Mill, and Rawls.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 1315 - APPLIED ETHICS

Minimum Credits: 3
Maximum Credits: 3
The application of ethical theory to specific issues of contemporary life. Specific topics vary with each offering of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 1319 - ETHICS AND SPORT

Minimum Credits: 3
Maximum Credits: 3
An examination of the ethical and social issues that arise in connection with sport.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 1320 - TOPICS IN SOCIAL PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course concentrates on a few selected philosophical problems concerning the nature of society; the selection will vary from one offering of the course to another. The course may be historical or topical in approach.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1330 - TOPICS IN POLITICAL PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course concentrates on a few selected philosophical problems concerning the nature and justification of government; the selection will vary from one offering of the course to another.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1340 - FEMINIST PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
A comparison of biological, psychological, and economic theories of the nature and causes of the oppression of women. Authors studied might include de Beauvoir, Freud, Marx, Veblen, and Emma Geldman.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: Global Studies

PHIL 1360 - BIOMEDICAL ETHICS

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course examines a selection of ethical problems arising in medicine, such as euthanasia, abortion, and the allocation of resources, and/or ethical issues relating to other species, such as vegetarianism, animal rights, and possible interplanetary morality. The selection will vary from one offering of the course to the next.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 1370 - PHILOSOPHY OF ART

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course addresses philosophical problems that arise in connection with art, such as the nature of works of art, the comparison and contrast between representational and non-representational art, the definition of beauty, and special obligations concerning art works.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1380 - BUSINESS ETHICS

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course considers a selection of ethical issues that arise in connection with business needs and practices, such as employer-employee relations, truth in advertising, responsibilities to consumers, fair and unfair competitive practices, environmental effects, contractual obligations, liability for damages, and governmental regulation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1385 - ETHICS AND ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
Ethicists and political philosophers are often interested in which economic policies we should adopt. For instance, should we have a school voucher

program? Should healthcare be subsidized by the state? Should income or resources be redistributed to achieve a more equitable society? The field of welfare economics is also interested in questions like these, and has developed a comprehensive ethical theory which allows the theoretical tools of economics to be brought to bear on, and offer answers to, these questions. Arguments imported from welfare economics are frequently cited in public policy debates. Figuring out what we think of these arguments requires a careful study of the theoretical and ethical assumptions implicit in the framework of welfare economics, as well as an appraisal of the kinds of ethical views welfare economics commits itself to.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 1390 - PHILOSOPHY OF LAW

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course examines a selection of philosophical questions that arise in connection with the theory and practice of law, including constitutional, criminal, and tort law. Topics might include such issues as the comparative role of judges and legislators in making law, the nature of justice, and the relation of law to morality.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1400 - RIGHTS AND HUMAN RIGHTS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 1410 - PHILOSOPHY OF ACTION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHIL 1420 - PHILOSOPHY OF LANGUAGE

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course in recent and contemporary philosophy of language; topics covered vary somewhat, but typically include many of: reference and descriptions, empiricist criteria of meaning, truth, the theory of speech acts, the analytic-synthetic distinction, theory of translation, possible worlds semantics, pragmatic theories of meaning, and so on.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Philosophy Course

PHIL 1440 - PHILOSOPHY OF MIND

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course in the philosophy of mind, taking up problems of both historical and contemporary interest. Topics vary, but are likely to include many of mind-body dualism, materialist reductionism, phenomenalism, the other-minds problem, philosophical behaviorism, qualia, propositional attitude ascriptions, intentionality, and so on.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1460 - THEORY OF KNOWLEDGE

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course in recent and contemporary epistemology. Topics vary somewhat, but generally include many of the following: skepticism, sense data and the myth of the given, induction and confirmation, definition of "knowing-that-p", holism and coherence, the status of common sense, and so on.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1480 - METAPHYSICS

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course considers a selection of central problems in metaphysics, such as the problems of realism, essentialism, free will, necessity and possibility, substance and property, persistence through time (including personal identity), the nature of truth, and so on.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1490 - TOPICS IN SYSTEMATIC PHILOSOPHY

Minimum Credits: 3
Maximum Credits: 3
This is an advanced undergraduate course devoted to specific problem areas in contemporary philosophy that are not dealt with in regular courses. Thus, the topics covered will vary considerably from one offering of the course to the next, but they might include such things as the theory of action, the philosophy of history, the free-will problem, realism and relativism, personal identity, and such like.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1500 - SYMBOLIC LOGIC

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course develops skills in formal and informal reasoning in predicate-quantifier logic, and covers formal semantics for sentential logic, informal semantics for predicate-quantifier logic, and elementary syntactic metatheory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHIL 0500
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

PHIL 1530 - SET THEORY

Minimum Credits: 3
Maximum Credits: 3
An elementary development of axiomatic set theory, together with a philosophical discussion of set-theoretic foundations of mathematics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PHIL 0500

PHIL 1550 - PROBABILITY AND INDUCTION

Minimum Credits: 3
Maximum Credits: 3

A survey of major issues regarding inductive reasoning in everyday life and in science. Various concepts of probability will be examined and related to human decision making. The classic problems of justification and induction, due to David Hume, will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHIL 0500

PHIL 1555 - RATIONALITY

Minimum Credits: 3
Maximum Credits: 3
This course will focus on an influential analysis of rationality: the game-theoretic notion, which has agents attempting to maximize their expected utility. We will consider the foundations of this approach, criticisms of it, and applications of it to several areas of philosophy (including political philosophy, philosophy of language, and philosophy of science).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1580 - PHILOSOPHY OF MATHEMATICS

Minimum Credits: 3
Maximum Credits: 3
A survey of issues in the philosophy of mathematics, emphasizing both a historical perspective and contemporary logical foundations of mathematics. Special attention is given to geometry or number theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHIL 1500

PHIL 1600 - PHILOSOPHY & RISE MODERN SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course explores the mutually reinforcing relationships between modern philosophy and modern empirical science in and around the seventeenth century. Authors studied might include Copernicus, Galileo, Bacon, Descartes, Locke, Newton, and Leibniz, as well as contemporary historians of science and philosophy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PHIL 1610 - INTRO TO PHILOSOPHY OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course provides a broad, introductory survey of current issues in philosophy of science and treats philosophical problems such as confirmation, which are common to all sciences, as well as problems peculiar to individual sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1612 - PHIL OF 20TH CENTURY PHYSICS

Minimum Credits: 3
Maximum Credits: 3
An examination of the fascinating philosophical problems to which modern physical theories have given rise. No previous formal training in physics or mathematics will be presupposed, since the basic physical ideas needed will be introduced largely qualitatively with an emphasis on concepts rather than equations. Topics will vary from year to year with instructor, but center around classical mechanics, quantum mechanics, and relativity theory.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1640 - PHILOSOPHY OF PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This advanced undergraduate course covers such topics as mind-body reductionism, behaviorism, functionalism, cognitivism, and the relation of artificial intelligence research to psychological theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1650 - PHILOSOPHY OF BIOLOGY

Minimum Credits: 3
Maximum Credits: 3
Philosophy of biology will consider foundational conceptual issues in biology like the nature and structure of biological explanation, the possibility of laws in evolutionary theory, the relationship between different causal components of biological processes (genetics and development), the problem of species reality and classification, the explanatory character of ascription of biological function, and the extension of biological explanations to human psychology and culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 1660 - PARADOX

Minimum Credits: 3
Maximum Credits: 3
This course explores paradoxes both for the fun of untangling an intriguing puzzle and for the more serious reason of the easy access they provide to some of the most important foundational issues in philosophy and the sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: Hourly Final

PHIL 1682 - FREEDOM AND DETERMINISM

Minimum Credits: 3
Maximum Credits: 3
This course analyzes three concepts of determinism--the logical determinism, logical determinism or fatalism, and physical determinism--and examines the various philosophical arguments designed either to show that determinism and free will do clash or alternatively that they are reconcilable.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 1690 - TOPICS IN PHILOSOPHY OF SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Discussion, at the advanced undergraduate level, of selected problems such as confirmation, concept formation, the nature of theories. In any given term, the course might focus on problems in physical, biological, or social sciences.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1760 - RELIGION AND RATIONALITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 1762 - THE GUIDE OF THE PERPLEXED

Minimum Credits: 3
Maximum Credits: 3
Moses Maimonides (1138-1204) was the greatest Jewish thinker of the medieval period, and remains highly influential today. Born in Spain, he became the leading rabbinic authority of his time by writing a compendium of Jewish law, the Mishnah Torah. He was also famous as a physician and author of medical works. His widest impact, however, has been through his masterpiece of philosophy of religion, The Guide of the Perplexed. This engaging, elusive book is important not only for its influence on such major thinkers as Aquinas, Spinoza, Leibniz, and Newton, but also for its insight into questions of religion and rationality. In this course we will study virtually all of the Guide, giving special attention to Maimonides' account of the fall, his theory of religious language, his arguments for the existence of god, his doctrine of creation, his teachings on religious experience, prophecy, and revelation, and his views on human perfection and immortality. In our sessions we will work closely and carefully through the text, at each step following up Maimonides' hints and challenges to his readers. Our goal will be not merely to appreciate the surface purport of the book, but also to discern its deeper implications, through which Maimonides sought to suggest, to a few of his readers, the secret meaning of the bible itself.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PHIL 1840 - SCIENCE AND RELIGION

Minimum Credits: 3
Maximum Credits: 3
Are science and religion at odds or harmonizable? Do they coincide or represent completely separate discourses? This course examines the relationship between science, rationality, faith, and religion. Special attention will be given to ancient creation narratives and their interpretation, historical dialogues regarding faith and reason in the Western monotheist faiths (Christianity, Judaism, Islam), the scientific revolution, and various approaches to evolutionary theory. We will also consider practical, contemporary issues such as neuroscience and religious practice, ecology and faith, and scientific views toward gender and race.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1890 - ISSUES IN PHILOSOPHY (VARIOUS)

Minimum Credits: 3
Maximum Credits: 3
This intensive, advanced-level seminar is reserved for special philosophical topics that do not fit standard course-catalog categories. Issues discussed vary from year to year, but tend to be narrowly focused and specialized.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any Other Philosophy Course

PHIL 1901 - INDEPENDENT STUDY--UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 9
This course is a way of offering university credit in philosophy for relevant experiences or work undertaken independently, with little or no formal

interaction with an instructor.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

PHIL 1902 - DIRECTED STUDY--UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 9
This course provides an individualized study program, on a topic not covered in the regular curriculum, under the close supervision of a faculty advisor. The student is generally expected to produce a substantial piece of written work.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PHIL 1903 - DIRECTED RESEARCH--UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 9
This course is a way of offering university credit in philosophy for research work undertaken by a student under the direction of a faculty member in connection with that faculty member's own research.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PHIL 1940 - HONORS THESIS/MAJORS

Minimum Credits: 3
Maximum Credits: 3
This is a special directed study for senior philosophy majors who wish to write an honors thesis over two terms. Use course PHIL 1941 for the second term.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

PHIL 1941 - HONORS THESIS 2/MAJORS

Minimum Credits: 3
Maximum Credits: 3
This is the second term of course 1940.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

PHIL 1942 - HONORS THESIS 3/MAJORS

Minimum Credits: 6
Maximum Credits: 6
This is a special directed study for senior philosophy majors who wish to write an honors thesis in one term.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

Physics & Astronomy

PHYS 0081 - SPACE AND TIME, LIGHT AND MATTER

Minimum Credits: 3
Maximum Credits: 3
This course introduces non-science students to the ideas of physics, with emphasis on modern physics.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or any MATH greater than or equal to MATH 0031 (Min Grade 'C') or MATH PLACEMENT SCORE (61 or greater) or SAT Math (620 or greater) or ACT Math (27 or greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PHYS 0082 - SCIENCE OF MUSICAL SOUNDS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the physical ideas underlying musical phenomena.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or any MATH greater than or equal to MATH 0031 (Min Grade 'C') or MATH PLACEMENT SCORE (61 or greater) or SAT Math (620 or greater) or ACT Math (27 or greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PHYS 0087 - PHYSICS AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the physical ideas underlying the role of nuclear science in modern life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or any MATH greater than or equal to MATH 0031 (Min Grade 'C') or MATH PLACEMENT SCORE (61 or greater) or SAT Math (620 or greater) or ACT Math (27 or greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PHYS 0088 - THE PHYSICS OF ENERGY

Minimum Credits: 3
Maximum Credits: 3
This is an introductory course on energy. The course will describe both qualitatively and quantitively energy use, energy generation, and sources of energy. In this course, we will explore potential energy sources and the limitations of potential energy sources for specific practical applications. The course will also describe many of the basic physical considerations related to climate change as this phenomenon has now become intimately connected with energy use.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement

PHYS 0089 - PHYSICS AND SCIENCE FICTION

Minimum Credits: 3
Maximum Credits: 3
This course looks at some of the physical ideas underlying stories by leading writers of science fiction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or any MATH greater than or equal to MATH 0031 (Min Grade 'C') or MATH PLACEMENT SCORE (61 or greater) or SAT Math (620 or greater) or ACT Math (27 or greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PHYS 0091 - CONCEPTUAL PHYSICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or MATH 0031 or greater (Min Grade 'C') or Math Placement Score 61 or greater or SAT Math Score (620 or greater) or ACT Math Score (27 or greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PHYS 0110 - INTRODUCTION TO PHYSICS 1

Minimum Credits: 3
Maximum Credits: 3
This is the first term of a two-term, algebra-based sequence in introductory physics. This term deals with mechanics, heat and thermodynamics, and waves.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or any MATH greater than or equal to MATH 0031 or SAT Math Score (620 or greater) or ACT Math Score (27 or greater) or Math Placement Score (61 or greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

PHYS 0111 - INTRODUCTION TO PHYSICS 2

Minimum Credits: 3
Maximum Credits: 3
This is the second term of a two-term, algebra-based sequence in introductory physics. This term deals with electricity and magnetism, optics, and modern physics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 0110 or 0174 or 0475; MIN GRAD: 'C' for all listed Courses
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

PHYS 0174 - BASIC PHYSICS, SCIENCE AND ENGINEERING 1 (INTEGRATED)

Minimum Credits: 4
Maximum Credits: 4
The integrated curriculum version of PHYS 0104, the first part of a two-term sequence (0174-0175) introduces students to the basic principles of mechanics. An effort has been made to achieve a better integration of physics with the first term of calculus, engineering, and chemistry. The theory of waves and the kinetic theory of gases will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: MATH 0220 or 0235
Course Attributes: DSAS Natural Science General Ed. Requirement, DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

PHYS 0175 - BASIC PHYSICS, SCIENCE AND ENGINEERING 2 (INTEGRATED)

Minimum Credits: 4
Maximum Credits: 4
The integrated curriculum version of PHYS 0105, the second part of a two-term sequence (0174-0175), introduces students to the basic principles of physics. An effort has been made to achieve a better integration of physics with the first term of calculus, engineering, and chemistry. Modern physics (special relativity, elementary quantum mechanics, and atomic structure) will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ:(PHYS 0174 MIN GRAD 'C' or 0475 MIN GRAD 'C') and (PREQ: MATH 0235 MIN GRAD 'C' or CREQ: MATH 0230)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science Seq.GE. Req.

PHYS 0212 - INTRODUCTION TO LABORATORY PHYSICS

Minimum Credits: 2
Maximum Credits: 2
This is an introductory physics laboratory associated with the physics 0110-0111 sequence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: PHYS 0111 or 0175 or 0476

PHYS 0219 - BASIC LABORATORY PHYSICS SCIENCE AND ENGINEERING

Minimum Credits: 2
Maximum Credits: 2
This is an introductory physics laboratory associated with the physics 0104-0105-0106 sequence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: PHYS 0175 or 0476

PHYS 0310 - FIRST YEAR SEMINAR IN PHYSICS AND ASTRONOMY

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit

PHYS 0410 - PHYSICS OF THE HUMAN BODY

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHYS 0411 - PHYSICS OF THE HUMAN BODY 2

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHYS 0475 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 1

Minimum Credits: 4
Maximum Credits: 4
This is the first term of a two-term honors version of the physics 0104-0105-0106 sequence. This term deals with mechanics, waves and thermodynamics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: MATH 0230 or 0235
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

PHYS 0476 - INTRODUCTION TO PHYSICS, SCIENCE AND ENGINEERING 2

Minimum Credits: 4
Maximum Credits: 4
This is the second term of a two-term honors version of the physics 0104-0105-0106 sequence. This term deals with electricity and magnetism, relativity, and an introduction to modern physics and quantum phenomena.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [PHYS 0174 (MIN GRADE 'B') or PHYS 0475 (MIN GRADE 'C')] and (MATH 0230 or 0235); CREQ: MATH 0240
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., University Honors Course

PHYS 0477 - INTRODUCTION TO THERMAL PHYSICS, RELATIVITY AND QUANTUM MECHANICS

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 0175 (B- or better) or PHYS 0476 (C or better); CREQ: MATH 0240

PHYS 0481 - PRINCIPLES OF MODERN PHYSICS 2

Minimum Credits: 3
Maximum Credits: 3
This is the second term of a two-term intermediate-level course in modern physics. This term deals with further applications of quantum mechanics to atoms, molecules, and solids, as well as an introduction to the physics of nuclei and particles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 0477 or 0479 MIN GRAD: 'C' for all listed Courses

PHYS 0520 - MODERN PHYSICS MEASUREMENTS

Minimum Credits: 3
Maximum Credits: 3
This honors laboratory course provides an introduction to the scientific questions and techniques in modern physical measurements, including exposure to various current experimental puzzles and accomplishments, hands-on experience with research grade equipment and microcomputer-controlled data acquisition interfaces, data analysis (and simple data analysis programs), prior preparation for data taking, and error estimation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 0175 or 0476

PHYS 0525 - ANALOG AND DIGITAL ELECTRONICS

Minimum Credits: 3
Maximum Credits: 3
A laboratory course designed to introduce the student to contemporary analog and digital electronics techniques used in basic science and engineering research. Topics include the study of measurement instruments, passive circuits, diode and transistor circuits, operational amplifiers and feedback, digital gates, analog to digital and digital to analog circuits. The course consists of a lecture and a lab.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 0219 or 0520; MIN GRADE: 'C' for listed Courses

PHYS 1310 - UNDERGRADUATE SEMINAR

Minimum Credits: 1
Maximum Credits: 1
The undergraduate seminar provides a venue for students to discuss topics of interest in physics and astronomy. It gives students experience presenting research in the form of a poster presentation. The seminar will give the students a taste of what conducting scientific research and

presenting scientific results is all about.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PHYS 0477 or 0479) and (PHYS 0520 or 0525 or 1361 or 1426 or ASTRON 1263) or (PHYS 0219 and ASTRON greater than or equal to ASTRON 1120 or PHYS greater than or equal to PHYS 1321
Course Attributes: Capstone Course

PHYS 1311 - UNDERGRADUATE SEMINAR

Minimum Credits: 1
Maximum Credits: 1
The undergraduate seminar provides a venue for students to discuss topics of interest in physics and astronomy. It gives students experience presenting research, both as a short oral communication, and in the form of a poster presentation, in formats similar to conference talks and poster papers given by researchers in the field at topical meetings. The seminar will give the students a taste of what conducting scientific research, and presenting scientific results, is all about.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 1310
Course Attributes: Capstone Course

PHYS 1321 - COMPUTATIONAL METHODS IN PHYSICS

Minimum Credits: 3
Maximum Credits: 3
Students will master computational techniques and good programming practice and apply these skills to enhance their understand of problems in physics and astronomy. The first 3 weeks of the course will introduce essential programming strategies and debugging techniques with the rest of the course devoted to applications. Topics include interpolation and approximation techniques, ordinary differential equations (e.g., projectile motion with drag and spin), oscillators (linear and nonlinear), orbits, data analysis/curve fitting, partial differential equations (e.g., fluid mechanics), and Fourier transforms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: (PHYS 0477 or 0479) and (PHYS 0219 or 0520 or CS 0008 or ENGR 0012) and MATH 0240 and (MATH 0290 or 1270)

PHYS 1331 - MECHANICS

Minimum Credits: 3
Maximum Credits: 3
This is an intermediate-level course dealing with classical mechanics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PHYS 0175 or 0476) and MATH 0240 MIN GRAD: 'C' for listed Courses]; CREQ: (MATH 0280 or 1180 or 1185) and (MATH 0290 or 1270)

PHYS 1341 - THERMODYNAMICS AND STATISTICAL MECHANICS

Minimum Credits: 3
Maximum Credits: 3
This course deals with the basic ideas of equilibrium thermodynamics and statistical mechanics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PHYS 0477 or 0479) and MATH 0240 and (MATH 0290 or 1270); MIN GRAD: 'C' for all listed Courses
Course Attributes: Capstone Course

PHYS 1351 - INTERMEDIATE ELECTRICITY AND MAGNETISM

Minimum Credits: 3
Maximum Credits: 3
This is an intermediate-level course in electricity and magnetism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [(PHYS 0175 or 0476) and MATH 0240; MIN GRAD: 'C' for listed Courses)]; CREQ: MATH 0290 or 1270

PHYS 1361 - WAVE MOTION AND OPTICS

Minimum Credits: 3
Maximum Credits: 3
This is an intermediate-level course dealing with wave motion and optics. Laboratory work is included as part of this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PHYS 0219 or 0520) and MATH 0240(MIN GRAD: 'C'); CREQ: MATH 0280 or 1180 or 1185

PHYS 1370 - INTRODUCTION TO QUANTUM MECHANICS 1

Minimum Credits: 3
Maximum Credits: 3
This is the first-term of a two-term introduction to quantum mechanics. This term introduces the necessary formalism and treats some of its basic applications.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PHYS 0477 or PHYS 0479) and (MATH 0280 or 1180 or 1185); CREQ: PHYS 1331 and 1351; MIN GRAD: 'C' for all listed Courses except PHYS 0477

PHYS 1371 - INTRODUCTION TO QUANTUM MECHANICS 2

Minimum Credits: 3
Maximum Credits: 3
This is the second-term of a two-term introduction to quantum mechanics. The quantum formalism developed in the first term will be applied in a variety of physical situations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 1370; MIN GRAD: 'C'
Course Attributes: Capstone Course

PHYS 1372 - ELECTROMAGNETIC THEORY

Minimum Credits: 3
Maximum Credits: 3
This is an advanced course in which Maxwell's equations are applied to a variety of electromagnetic phenomena.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PHYS 0477 or 0479) and 1351 and (MATH 0280 or 1180 or 1185); CREQ: PHYS 1331; MIN GRAD: 'C-' PHYS 1351 / MATH 0280, 1180, 1185
Course Attributes: Capstone Course

PHYS 1373 - MATHEMATICAL METHODS IN PHYSICS

Minimum Credits: 3
Maximum Credits: 3
This course deals with mathematical techniques that are commonly used in physics.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: PHYS 1370

PHYS 1374 - SOLID STATE PHYSICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 0477 or PHYS 0479 or CHEM 0710 or CHEM 1410

PHYS 1375 - FOUNDATIONS OF NANOSCIENCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PHYS 1376 - INTRODUCTION TO BIOLOGICAL PHYSICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PHYS 0111 or 0175 or 476) and [(MATH 0230 or 0235) or (MATH 0220 and STAT 1000)]

PHYS 1378 - INTRODUCTION TO NUCLEAR AND PARTICLE PHYSICS

Minimum Credits: 3
Maximum Credits: 3
This course gives an introduction into the theory concepts and the experimental methods used for nuclear and particle physics research. While some of the basic principles will be discussed from a historical perspective, the emphasis of this course is on modern developments, such as the standard model and the Higgs Boson, supersymmtry, extra dimensions, dark matter, CP-violation and baryogenesis, and neutrino oscillations. The main aspects of physics processes will be understood and calculated from symmetry principles and kinematics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: 1370

PHYS 1415 - QUANTUM PHYSICS AT THE NANOSCALE

Minimum Credits: 2
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

PHYS 1426 - MODERN PHYSICS LABORATORY

Minimum Credits: 2
Maximum Credits: 2
This is an advanced laboratory course that introduces students to the experimental techniques and equipment used in research laboratories.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PHYS 0525 and (0477 or 0479)

PHYS 1626 - MODERN PHYSICS LAB/WRIT PRAC

Minimum Credits: 1
Maximum Credits: 1
This is a writing practicum to accompany physics 1226.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: PHYS 1426 or ASTRON 1263; PLAN: Physics(BS) or Physics and Astronomy (BS, BA) or Astronomy (BA); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

PHYS 1661 - WAVE MOTION AND OPTICS WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
This is a writing practicum to accompany physics 1361.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: CREQ: PHYS 0520 or 1361; PLAN: Physics(BS) or Physics and Astronomy(BS, BA); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

PHYS 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 9
This course places the student in an "on-the-job" setting in which they receive practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

PHYS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
This course gives students the opportunity to design and carry out an individual project not covered by any course offerings.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

PHYS 1902 - DIRECTED READING

Minimum Credits: 1
Maximum Credits: 9
This course is designed to give students the opportunity to design a plan of reading to be agreed upon by the student and a supervising faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PHYS 1903 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 9
This course is designed to give students the opportunity to design and carry out a research project to be agreed upon by the student and a supervising faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies

Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

PHYS 1904 - EXPERIENCE IN UNDERGRADUATE TEACHING

Minimum Credits: 1
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Physics and Astronomy

ASTRON 0086 - OBSERVATIONAL ASTRONOMY

Minimum Credits: 3
Maximum Credits: 3
This course is for students who have a desire to become familiar with the nature and motions of celestial objects in the night sky and techniques to observe them. The course will be given at a level suitable for both science and non-science majors who want to learn how to use a telescope and enjoy observational and practical astronomy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any MATH Course or MATH PLACEMENT SCORE (61 or Greater) or SAT HIMAT SCORE (620 or Greater) or ACT HIMAT SCORE (27 or Greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ASTRON 0087 - BASICS OF SPACE FLIGHT

Minimum Credits: 3
Maximum Credits: 3
Intended for non-science majors, this course focuses on identifying and understanding the general concepts associated with space flight.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any MATH Course or MATH PLACEMENT SCORE (61 or Greater) or SAT HIMAT SCORE (620 or Greater) or ACT HIMAT SCORE (27 or Greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ASTRON 0088 - STONEHENGE TO HUBBLE

Minimum Credits: 3
Maximum Credits: 3
A course focusing on practical astronomy and providing a historical perspective of our place in the universe. Phenomena that can be readily observed with the unaided eye or a small telescope are discussed. The historical perspective starts with the earliest views, and discusses scientific discovery as a process leading up to modern ideas of the expanding universe of galaxies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any MATH Course or MATH PLACEMENT SCORE (61 or Greater) or SAT HIMAT SCORE (620 or Greater) or ACT HIMAT SCORE (27 or Greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ASTRON 0089 - STARS, GALAXIES AND THE COSMOS

Minimum Credits: 3
Maximum Credits: 3
This is a self-contained course for students not majoring in the physical sciences. The Universe in which we live is an unimaginably vast and rich place that is understandable through the same physical laws that govern our existence here on Earth. By exploring topics from our nearest neighboring stars to the farthest galaxies newly formed after the Big Bang, this course will engage your mind to better understand our Universe and your everyday world. Through active and engaged participatory lectures, we will observe the cosmos and learn about the birth, life, and death of stars

and their mysterious remnants: pulsars and black holes. From studying stars and our own Milky Way Galaxy, we will expand our vision to cosmology and investigate the origin and ultimate fate of the Universe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: Any MATH Course or MATH PLACEMENT SCORE (61 or Greater) or SAT HIMAT SCORE (620 or Greater) or ACT HIMAT SCORE (27 or Greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ASTRON 0113 - INTRODUCTION TO ASTROPHYSICS

Minimum Credits: 3
Maximum Credits: 3
An introduction to the physics of the solar system, stars, galaxies, extragalactic objects and the Universe at large. Topics include: size scales of the Universe, some review of basic physics, telescopes, the evolution and deaths of stars, the interstellar medium, star clusters, our Milky Way galaxy, external galaxy formation and evolution, active galactic nuclei and quasars, dark matter, dark energy, and cosmology. This course is intended for students majoring in the natural sciences. Although calculus is not used in this course, algebra and trigonometry are used extensively. Students who are not majoring in the natural sciences and/or who are not comfortable with algebra and trigonometry-based problem solving are advised to take ASTRON 0089. Although there are no formal physics prerequisites for ASTRON 0113, experience with at least high school physics is recommended.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0020 or any MATH greater than or equal to MATH 0031 (Min Grade 'C') or MATH PLACEMENT SCORE (61 or greater)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ASTRON 0413 - HONORS INTRODUCTION TO ASTRONOMY

Minimum Credits: 4
Maximum Credits: 4
This course will be an introduction to astronomy and astrophysics. The 4-credit honors course will consists of all aspects of the 3-credit course, including lectures and homework with additional problems tailored for this course. ASTRON 0413 includes an additional 50-minute class session each week. In these extra sessions, basic topics will be covered in more detail than in ASTRON 0113. These extra sessions will also involve significant problem solving and discussions of the derivations of fundamental results in astronomy and astrophysics. Students considering a major in physics, astronomy, or physics and astronomy are strongly encouraged to take ASTRON 0413 instead of ASTRON 0113.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (MATH 0230 or 0235) and (PHYS 0110 or 0174 or 0475)
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

ASTRON 1120 - STARS; STELLAR STRUCTURE AND EVOLUTION

Minimum Credits: 3
Maximum Credits: 3
Topics covered include: stellar properties (mass, radius, luminosity, temperature); deductions from binary stars; the sun; the HR diagram; stellar atmospheres and interiors; stars in hydrostatic and thermal equilibrium; equations of state for a perfect gas and for degenerate matter; energy generation and nuclear fusion reactions; opacities; life histories of stars according to mass; star formation; main sequence stars; red giants; white dwarfs; red supergiants; supernovae; neutron stars (pulsars); black holes; evolution of binary systems; results from clusters.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ASTRON 0113 or 0413) and MATH 0240 and (MATH 1270 or MATH 0290 or MATH 0250); CREQ: PHYS 0477 or 0479

ASTRON 1121 - GALAXIES AND COSMOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics covered include: the milky way galaxy and its properties; external galaxies and their properties; evolution of galaxies; the expansion of the universe (Hubble Law) and the Extragalactic Distance Scale; Clustering of Galaxies; Dark Matter; Active Galaxies and Quasars (models with supermassive black holes); General Relativity, Cosmology, and the Big Bang Model; the Age and fate of the Universe; the History of the Early

Universe (Inflation, Nucleosynthesis of Light Elements, 3 degree background radiation; the IgM and Galaxy Formation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ASTRON 0113 or 0413) and MATH 0240 and (MATH 1270 or 0290 or 0250); CREQ: PHYS 0477 or 0479

ASTRON 1122 - THE SOLAR SYSTEM AND EXTRASOLAR PLANETS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

ASTRON 1263 - TECHNIQUES OF ASTRONOMY

Minimum Credits: 3
Maximum Credits: 3
The course will roughly be divided into three parts: (1) telescopes, instrumentation, and detectors for radio, IR/ optical/UV, X-Ray, and gamma-ray astronomy. (2) Theoretical foundations of observational techniques, (astronomical coordinates, data acquisition, and sources of noise), data processing, analysis techniques, statistics, and model fitting. (3) Practical problems in making observations, data processing, and data analysis, with special attention paid to understanding errors and uncertainties in results.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (ASTRON 0113 or 0413) and (PHYS 0175 or 0476) and (PHYS 0219 or 0520)

ASTRON 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 9
This course places the student in an "on-the-job" setting in which they receive practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

ASTRON 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
This course gives students the opportunity to design and carry out an individual project not covered by any course offerings.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

ASTRON 1902 - DIRECTED READING

Minimum Credits: 1
Maximum Credits: 9
This course is designed to give students the opportunity to design a plan of reading to be agreed upon by the student and a supervising faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

ASTRON 1903 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 9
This course is designed to give students the opportunity to design and carry out a research project to be agreed upon by the student and a supervising faculty member.

Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PITT

PITT 0130 - WELLNESS AND RESILIENCE

Minimum Credits: 3
Maximum Credits: 3
Wellness and Resilience
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3

PITT 0210 - ANTI-BLACK RACISM: HISTORY, IDEOLOGY, AND RESISTANCE

Minimum Credits: 1
Maximum Credits: 1
In the wake of the police killings of George Floyd, Breonna Taylor, Tony McDade and many others in recent months, activists and scholars in the United States have taken to the streets, the workplace, and classrooms to decry anti-Black racism and call attention to the ongoing devaluation of Black lives in the US and globally. The wave of uprisings that have swept the nation and globe represent part of a long struggle of anti-racist organizing--one that can be traced back hundreds of years. This multidisciplinary course seeks to provide a broad overview of this rich and dynamic history. Built around the expertise of Pitt faculty and Pittsburgh area activists, this course will introduce students to the established tradition of scholarship focused on the Black experience and Black cultural expression. It also seeks to examine the development, spread, and articulations of anti-Black racism in the United States and around the world. The course will grapple with three key areas of inquiry: the roots, ideology, and resistance to anti-Black racism. Each unit will be focused through readings, lectures and discussions. First, we will explore the roots of anti-Black racism in the United States, drawing connections to African history, the history of slavery, and the Transatlantic Slave trade. Second, the course will grapple with the ideology of anti-Black racism--the ideas that undergird the creation of racial hierarchies, often shaped by pseudo-science and eugenics. Third, the course will highlight the theme of resistance, paying close attention to the range of political strategies and tactics Black activists and their allies have employed in their effort to obtain a more just and equal society here and internationally. Significantly, the course employs an intersectional analysis--taking into account how race is interwoven into other categories including ethnicity, gender, class, sexuality and nationality. We will use a variety of scholarly disciplines spanning the Humanities, Social Sciences, the Arts, Science and Public Health to explore these themes to help students understand how anti-Black racism functions in US society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

Polish

POLISH 0010 - ELEMENTARY POLISH 1

Minimum Credits: 3
Maximum Credits: 3
A traditional four-skills language course, with equal emphasis sis on speaking, reading, writing, and listening. By the end of the first semester, students have developed a good polish accent and the ability to converse on many practical subjects, including family, friends, work, studies, free time and lifestyle.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

POLISH 0020 - ELEMENTARY POLISH 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of elementary POLISH 0010, this four-skill language course extends the grammatical coverage to include verbal aspect, numeral expressions, and the locative, dative and genitive cases. Emphasis continues to be on developing spoken language competence.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

POLISH 0030 - INTERMEDIATE POLISH 3

Minimum Credits: 3
Maximum Credits: 3
The continuation of elementary POLISH 0020, this course focuses more on written polish and developing listening comprehension than in the first-year course. Attention is paid to developing a good control of basic idioms, and to the formation of participles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

POLISH 0040 - INTERMEDIATE POLISH 4

Minimum Credits: 3
Maximum Credits: 3
A continuation of intermediate POLISH 7030, this course attempts to round out the student's basic oral competence in relation to specific matters of polish culture and reality. For many students, this course is preparatory to summer study in Poland.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

POLISH 0210 - INTENSIVE BEGINNING POLISH

Minimum Credits: 6
Maximum Credits: 6
This is a four-skill intensive course in beginning Polish language which is to be offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies, West European Studies

POLISH 0211 - BEGINNING INTENSIVE POLISH PITT/POLAND

Minimum Credits: 10
Maximum Credits: 10
This is a first-year polish course equivalent to POLISH 0210. Four weeks on campus and four weeks in class in Poland. Part of the East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies, West European Studies

POLISH 0220 - INTENSIVE INTERMEDIATE POLISH

Minimum Credits: 6
Maximum Credits: 6
This is a four-skill intensive course in intermediate Polish which is offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies, West European Studies

POLISH 0221 - INTERMEDIATE INTENSIVE POLISH PITT/POLAND

Minimum Credits: 10
Maximum Credits: 10

This is a second-year course in Polish equivalent to POLISH 0210. Four weeks on campus and four weeks in class in Poland. Part of the East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies, West European Studies

POLISH 0222 - INTERMEDIATE INTENSVIVE POLISH IN POLAND

Minimum Credits: 4
Maximum Credits: 4
This is a second year second semester course equivalent to POLISH 0040. It is taught in Lodz Poland and is part of the East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, West European Studies

POLISH 0223 - INTERMEDIATE POLISH IN POLAND

Minimum Credits: 6
Maximum Credits: 6
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

POLISH 0230 - ADVANCED INTENSIVE POLISH

Minimum Credits: 6
Maximum Credits: 6
This is a four-skill intensive course in advanced Polish, which is offered as part of the summer intensive workshops.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

POLISH 0231 - ADVANCED INTENSIVE POLISH PITT/POLAND

Minimum Credits: 10
Maximum Credits: 10
This is a ten-week course in Advanced Polish language, six weeks of intensive study in Pittsburgh followed by four weeks of intensive study in Krakow Poland.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

POLISH 0232 - ADVANCED INTENSIVE POLISH IN POLAND

Minimum Credits: 4
Maximum Credits: 4
This is four week course of Advanced Polish in Krakow Poland.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

POLISH 0233 - ADVANCED POLISH IN POLAND

Minimum Credits: 6
Maximum Credits: 6
This is an advanced-level four-skills Polish language course held in Krakow, Poland, and is part of the Slavic, East European and near eastern summer language institute.
Academic Career: Undergraduate

Course Component: Workshop
Grade Component: LG/SNC Elective Basis

POLISH 0325 - SHORT STORY IN POLISH CONTEXT

Minimum Credits: 3
Maximum Credits: 3
An introduction to the formal analysis of the literary genre of the short story, on the example of works of polish literature of the 19th and 20th centuries. The course will examine works both formally and as they reflect the reality or literary-social concerns of given historical periods 19th century positivism, women's issues, prison-camp literature, post-war literature of the absurd, and others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

POLISH 0400 - ADVANCED POLISH THROUGH FILM

Minimum Credits: 3
Maximum Credits: 3
A two-semester sequence in polish advanced conversation, reading, and composition. This course aims at developing the student's command of idioms, while thoroughly reviewing all aspects of polish conjugation and declension. Focus is placed on the contemporary colloquial Polish language, as spoken by the young in authentic Polish cultural contexts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

POLISH 0410 - ADVANCED POLISH 2

Minimum Credits: 3
Maximum Credits: 3
This is the second part of third-year Polish language. (Advanced level).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

POLISH 0870 - CONTEMPORARY POLISH CINEMA:LITERATURE ON FILM

Minimum Credits: 3
Maximum Credits: 3
This course presents contemporary Polish cinema from 1945 to the present. Concepts will be studied in their historical, political, philosophical, and aesthetic perspective. The main trends (schools, movements) in Polish cinema, such as the so-called Polish school and the cinema of moral concern, and the works of most important modern polish filmmakers will be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

POLISH 1260 - SURVEY OF POLISH LITERATURE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
Major literary monuments of polish literature are examined against the background of Polish history and culture. Works are related to the major literary and intellectual currents of the time and are placed in both a Polish and a general European context. Literary works are additionally examined critically from a formalistic literary point of view, the aim being to develop in students the basic concepts and vocabulary of literary criticism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, Writing Requirement Course

POLISH 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows students to work independently on individually designed projects.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

Political Science

PS 0200 - AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course is, quite generally, designed to provide students with a basic working knowledge of the basic goals of the constitutional framers, giving students an understanding of the purposes of the American political system; the essential structures (or institutions) within the American political system, the behavior (broadly defined) of the actors within the American political system, the purpose and performance of the linkage institutions in the United States (possibly including political parties, elections, and interest groups); and the types of policies that are often produced by a system with the characteristics of those found in the United States. Depending on the interests, area of expertise, and inclinations of the particular instructor, some of these may be emphasized more heavily than others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 0300 - COMPARATIVE POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course provides students with basic information about a range of political systems outside the United States and teaches them to use that information to examine major theories about politics. The course is also designed to help students understand the government and the politics of the United States in comparative perspective and to develop some understanding of comparative methodology and the logic of comparison as a social science method. Depending on the interests, area of expertise, and inclinations of the particular instructor, some regions and topics might be emphasized more heavily than others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

PS 0500 - INTERNATIONAL RELATIONS

Minimum Credits: 3
Maximum Credits: 3
This course aims to increase students' knowledge of the history of the modern state system and, in particular, political developments during the past few decades. It introduces students to basic concepts and analytic frameworks that political scientists employ to understand world politics, enhancing students' knowledge of international institutions that play important roles in world politics and exploring current issues in world affairs relating to human welfare and security. Depending on the interests, area of expertise, and inclinations of the particular instructor, some of these may be emphasized more heavily than others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE.

Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies, West European Studies

PS 0550 - INTRODUCTION TO GLOBAL STUDIES

Minimum Credits: 3
Maximum Credits: 3
Global Studies is a rapidly growing interdisciplinary field that explores how people interact with one another and with nature across existing boundaries, over long distances, and in ways that affect the entire planet. It provides new and exciting ways of looking at connections and divisions in the world beyond the confines of particular places, nation states, and regions. This course provides an introduction to the field. It examines current global trends and issues in ways that encourage you to think critically about how we analyze, interpret, and respond to global interactions and their consequences for different regions, localities, and groups. It gives particular attention to the concept of globalization, highlighting the controversies surrounding its use and engaging core debates about the impact of global and transnational processes on economic relations, politics and governance, cultural interactions, and the environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Global Issues General Ed. Requirement, Global Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 0600 - POLITICAL THEORY

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the idea of normative political theory and to important authors and concepts in the western political theory tradition. Students will learn to understand both historical and contemporary debates surrounding important political concepts such as authority, justice, liberty, and democracy, and to appreciate the differences among normative, empirical, logical, and faith-based political claims. Students will learn to read critically and analytically, to make simple normative arguments, and to explain the specific role of normative arguments in political science and political life. Depending on the interests, area of expertise, and inclinations of the particular instructor, some of these may be emphasized more heavily than others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PS 0700 - RESEARCH METHODS IN POLITICAL SCIENCE

Minimum Credits: 3
Maximum Credits: 3
The course provides an introduction to scientific inquiry applied to the study of politics. The main emphasis of this course is to introduce political science majors to key analytical concepts and to their application to the study of politics. The course covers the logic of scientific inquiry, research design, and quantitative methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

PS 0835 - HAMILTON

Minimum Credits: 3
Maximum Credits: 3
This class is an inquiry into Hamilton the Musical and Alexander Hamilton the political thinker. It is divided into three sections, where exploration of the Political, Theatrical, and Musical/Cultural significance of both the musical and the historical figure is conducted.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PS 1000 - HONORS THESIS-MAJORS

Minimum Credits: 3
Maximum Credits: 3
Students prepare a thesis, under guidance of a faculty advisor, which is read and evaluated by a committee of three faculty members.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

PS 1201 - CONSTITUTION AND CIVIL LIBERTIES

Minimum Credits: 3
Maximum Credits: 3
The course will explore major topics in the area of civil liberties and civil rights which have concerned the Supreme Court in recent years and which have provoked extensive political and social controversy. Examples include decisions about discrimination, privacy, freedom of speech and assembly, and conflicts between freedom of the press and a fair trial.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1202 - AMERICAN CONSTITUTIONAL LAW

Minimum Credits: 3
Maximum Credits: 3
The United States constitution plays an extraordinarily powerful role in American political life. The primary focus of this course is examination of the role of constitutional law in the American political process. We do this by analyzing constitutional interpretation by the United States Supreme Court and other federal courts in its major decisions. Students will learn how the court reached its decisions, who some significant justices have been, how the court considered contending arguments, and what the consequences of these decisions for our political system have been. Topics include the development of judicial review and close analysis of the way in which the court has addressed the two major structural features of the U.S. Constitution ' separation of powers and federalism in an historic and contemporary setting. Specific issues in these areas are struggles over presidential and congressional power and national versus state power. We also address issues regarding civil liberties and civil rights. Students should find this course helpful in reaching a more sophisticated understanding of the major issues of constitutional law in American life, as well as providing a useful background to the cases and kinds of legal analysis they may pursue in further study in law school or other graduate study.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1203 - JUDICIAL POLITICS

Minimum Credits: 3
Maximum Credits: 3
The course will focus on judicial policy making and the political, social and economic underpinnings influencing cases and their decisions. Areas of focus will be: right of privacy (sexual orientation and abortion), classification (race and gender), speech (freedom of speech and press and the internet), religion (exercise and establishment), and criminal (investigations, trials and punishment).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PS 0200

PS 1204 - WOMEN IN POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course will consider political issues and explore the changing political role of women as citizens, candidates, office-holders, and policymakers. The emphasis will be on the American political experience, although examples will be drawn from other countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

PS 1205 - RACE, GENDER AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course deals with the political consequences of ethnic identity in the advanced industrial states of North America and Western Europe. The major theoretical concerns include the sources of ethnic identity, the relationship between ethnicity and social class, and the persistence or resurgence of ethnic political movements in contemporary societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1211 - LEGISLATIVE PROCESS

Minimum Credits: 3
Maximum Credits: 3
This course provides an analysis of the legislative process in modern democracies with primary attention devoted to the legislative process in the United States. The history and meaning of representation is analyzed as is the behavior of participants in the legislative process. The impact of social-economic forces on decision-making in the United States is studied as are the roles of interest groups, political parties, the executive branch, and the judiciary.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1212 - AMERICAN PRESIDENCY

Minimum Credits: 3
Maximum Credits: 3
This course provides an analysis of presidential leadership in the united states. The first part of the course deals with factors helping to explain presidential leadership; how presidents are nominated and elected, the constitutional framework within which the presidency operates, presidential relations with the bureaucracy, and presidential personality. This framework is then used for an intensive analysis of presidential leadership in foreign and domestic policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1213 - LAW AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
Examines the relationship between law and values, law and power, and law and discretion. Legal reasoning is examined as applied to statutory, case, and constitutional law.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PS 1214 - US CONGRESS

Minimum Credits: 3
Maximum Credits: 3
This course will explore the evolution and current place of the U.S. Congress within the American political system beginning with an examination of the theory and history of electing representatives to government. Students will examine the role and structure of the legislative branch as anticipated in the American constitution. Other areas of focus include the congressional election process, the importance of congressional committees and differences in rules for the house and senate, policy making, and how congress relates to the other two branches of government. A key overarching goal in this course is to assess challenges and changes facing the contemporary U.S. Congress.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

PS 1220 - SPORTS AND AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the intersection of politics and sports from a social science perspective. We will critically examine empirical evidence on the

politics of sports on such topics as race, gender, stadium siting, concussions, collective bargaining, and corruption. These are just a few of the issues that demonstrate how sports and politics are intertwined. Indeed, sports are even used as a tool by government to promote nationalism (e.g., the olympics, the singing of the national anthem before events, etc.). You do not need to be a fan of sports to understand and analyze the relationship between them and politics; indeed, being a fan may lead you to have "blind spots" on certain topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3

PS 1230 - INTEREST GROUP POLITICS

Minimum Credits: 3
Maximum Credits: 3
Are interest groups vital or vicious? Do interest groups use money to `buy power,' or do they play a key part in the representation of diverse ideas? What roles do, and should, interest groups (i.e., Special interests, pressure groups, lobbyists) play in democracies? This course explores the role of interest groups in the participation and representation of citizens in the United States. Focusing on key themes like liberty and equality, the course examines what interest groups are, what they do, and what implications that has for the laws that get passed and enforced, political campaigns, the ability of different groups (that differ by race/ethnicity, income, religion, and sexual preference) to get their voices heard in the political process, and what could be done to improve or curb their influence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1231 - POLITICAL PARTIES AND ELECTIONS

Minimum Credits: 3
Maximum Credits: 3
This course examines the organization and character of American political parties, the impact of environmental factors on party processes and behavior, patterns of party competition, and the role of parties in shaping public policy and in providing a linkage between public and government. Attention is also given to the political behavior of the American public. Recent changes in the organization of party institutions are examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1232 - POLITICAL ATTITDE & PUBLIC OPIN

Minimum Credits: 3
Maximum Credits: 3
This course explores the formation and measurement of mass public opinion. Topics include: how individuals gather information; the formation of political ideology, political attitudes, and political preferences; the stability of public opinions across different issues; the relationship between mass public opinion and government policy (both what it is, and what it should be); and methods for measuring public opinion, including public opinion surveys.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1233 - POLITICAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
There are numerous ways that we can explain political behavior (including both overt behavior such as voting and latent behaviors such as attitudes and preferences). In this course, we consider a number of such explanations (all from the discipline of psychology), including those rooted in personality, biology, emotions, culture, and environmental influence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1234 - ELECTORAL BEHAVIORS AND DEMOCRATIC PROCESS

Minimum Credits: 3
Maximum Credits: 3
This course examines the factors that affect national electoral outcomes in the U.S.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1235 - MEDIA AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
The media is all around us, but what impact does it have? It permeates everything from leisure and entertainment to how candidates communicate with the public and what political decisions get made. This course tackles three broad questions about the intersection of media and politics. First, how is news created and why does it matter? For example, are late night talk shows like Stephen Colbert or the internet news sources; why or why not? Second, how is the media used in political campaigns and how does it influence campaigns? Can a bad tweet (i.e. Anthony Weiner) end a campaign or a political career? Third, how do the media shape the creation of public policies ' the laws that do or do not get passed ' and the decisions that get made? Can media-savvy politicians use the media to help their cause or rally public support for big decisions like going to war?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1240 - THE POLITICS OF DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
This course explores the benefits and pitfalls of diversity both in American national politics and the politics of everyday life. Students will read and discuss some of the top research on questions surrounding diversity and will conduct original research on the topic. Students will also learn valuable skills they will be able to bring to bear as they enter today's diverse workplaces.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PS 1241 - PUBLIC ADMINISTRATION AND POLITICAL SYSTEM

Minimum Credits: 3
Maximum Credits: 3
This course analyses the nature of the public bureaucracy in the United States and its role in governance. Special emphasis is placed on questions of accountability and responsibility.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1250 - GAMES, POLITICS, AND STRATEGY

Minimum Credits: 3
Maximum Credits: 3
How can we better understand politics by viewing it as a game of strategy? What can we really say about the "will of the majority"? Can democratic procedures be manipulated? How is conflict like a game of poker? Campaigns, elections, persuasion, lobbying, conflict, and war involve elements of competition, cooperation, and chance. The course develops analytical tools that can be applied to a variety of political phenomena. Learn how to model and analyze strategic interaction by playing classroom games and applying tools from game theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1251 - URBAN GOVERNMENT AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the key structures, procedures and problems of cities and urban areas. Topics covered include: city-suburban conflicts, relations between cities and the federal government, forms of local government and their advantages and disadvantages, property taxes, housing, urban renewal, crime, courts, and education. The principal objective of the course is to help the student develop a well-informed and differentiated view of urban places and problems.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PS 1252 - STATE GOVERNMENT

Minimum Credits: 3
Maximum Credits: 3
This course will survey political processes and public policy outcomes in the fifty American states. Policy areas to be covered include the environment, era, taxation, crime and law enforcement, and welfare.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1261 - AMERICAN PUBLIC POLICY

Minimum Credits: 3
Maximum Credits: 3
This course will focus on a variety of public policy issues. The issues include social welfare programs, management of the economy, governmental regulation of business activities, environmental programs, urban problems, civil rights, civil liberties, crime control efforts, and foreign policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PS 1262 - HEALTH POLICY IN UNITED STATES

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to current problems of health care and health policy in the United States. Description and analysis of the proposals, current practices, and the reactions of interest groups will be the central theme of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1263 - HEALTH POLICY ANALYSIS: CONCEPTUAL FOUNDATION

Minimum Credits: 3
Maximum Credits: 3
Twenty-first century America is marked by deep and seemingly incommensurable divisions in terms of public policy solutions to our most intractable issues. Health policy challenges are not immune to these deep divisions, as the debate during and since the passage of the Affordable Care Act illustrates. Positions on key public policy issues are driven by a variety of philosophical, social, and cognitive phenomena. In this class, we will explore these phenomena and how they drive the derivation, implementation, and evaluation of public policy. We will apply the conceptual understanding of these phenomena to current health policy issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PS 1264 - AMERICAN POLITICS THROUGH FILM

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1275 - RELIGION AND AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
In recent years religious groups and religious values have played an increasingly prominent role in politics in many countries, including the United States. The purpose of this course will be to consider the public and political aspects of religion in the United States. Religious beliefs and institutions

have wide-ranging implications for civic norms, public policy, political leadership, international relations, and the treatment of various social groups. After an historical survey of the role of religion in American politics, the second part of the course will focus on the contemporary impact of American religious groups and values on public opinion, lobbying, and electoral choice. We will also discuss the implications of the doctrine of "separation of church and state" for law, education, and civil liberties.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1281 - CAPSTONE SEMINAR IN AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
Capstones are writing intensive courses for senior, PS majors. Subject matter will vary from term to term depending on the interests, area of expertise, and inclinations of the particular instructor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: PS 0200; PLAN: Political Science (BA or BS or BPH); LVL:Sr; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

PS 1283 - TOPICS IN AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
Current topics of interest in American politics. Topics covered vary with instructor and term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1291 - WOMEN IN POLITICS - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course will consider political issues and explore the changing political role of women as citizens, candidates, office-holders, and policymakers. The emphasis will be on the American political experience, although examples will be drawn from other countries. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1292 - RACE, GENDER, AND POLITICS - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course deals with the political consequences of ethnic identity in the advanced industrial states of North America and Western Europe. The major theoretical concerns include the sources of ethnic identity, the relationship between ethnicity and social class, and the persistence or resurgence of ethnic political movements in contemporary societies. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1293 - LEGISLATIVE PROCESS - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course provides an analysis of the legislative process in modern democracies with primary attention devoted to the legislative process in the United States. The history and meaning of representation is analyzed as is the behavior of participants in the legislative process. The impact of social-economic forces on decision-making in the United States is studied as are the roles of interest groups, political parties, the executive branch, and the

judiciary. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1294 - POLITICAL ATTITUDE - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course explores the formation and measurement of mass public opinion. Topics include: how individuals gather information; the formation of political ideology, political attitudes, and political preferences; the stability of public opinions across different issues; the relationship between mass public opinion and government policy (both what it is, and what it should be); and methods for measuring public opinion, including public opinion surveys. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1295 - POLITICAL PSYCHOLOGY - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
There are numerous ways that we can explain political behavior (including both overt behavior such as voting and latent behaviors such as attitudes and preferences). In this course, we consider a number of such explanations (all from the discipline of psychology), including those rooted in personality, biology, emotions, culture, and environmental influence. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1299 - ANALYSIS OF AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
This class focuses on significant training in a specific analysis method or methods to complement the study of American Politics, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1300 - CAPSTONE IN RUSSIAN AND EAST EUROPEAN STUDIES

Minimum Credits: 3
Maximum Credits: 3
The objective of this capstone course in Russia and east European studies is to provide you with the opportunity to draw on and synthesize all of the skills and knowledge gained in the various courses and seminars that you have taken in the process of earning your REES certificate, and apply them to a topic of particular interest to you. The course will culminate in an analytical/research paper on a topic in Russian and east European studies to be chosen by each individual student. In keeping with multidisciplinary objectives of our certificate, the paper must draw on methodologies and literature from multiple disciplines.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Capstone Course, Writing Requirement Course

PS 1301 - COMPETING PERSPECTIVES ON GLOBAL ENERGY: FROM WESTERN PA TO EASTERN EUROPE

Minimum Credits: 3
Maximum Credits: 3
THIS COURSE PROVIDES PROFESSIONAL SCHOOL STUDENTS IN THE FIELDS OF BUSINESS, LAW, ENGINEERING, PUBLIC POLICY AND OTHER AREAS WITH A FIRST-HAND EXPERIENCE OF THE GLOBAL IMPACT OF CONTEMPORARY DEVELOPMENTS

IN THE NATURAL GAS AND OTHER ENERGY SECTORS. PARTICIPANTS WILL FIRST WITNESS THE EFFECT THAT MARCELLUS SHALE HAS HAD IN WESTERN PA AND THEN SEE HOW THESE DEVELOPMENTS ARE IMPACTING THE US'S FOREIGN POLICY AND TRADE PRACTICES. AFTER THIS, STUDENTS WILL BE FAMILIARIZED WITH A VERY DIFFERENT SIDE OF THE GLOBAL NATURAL GAS AND ENERGY EQUATION BY TRAVELLING TO MOSCOW, WHERE THEY WILL SEE THE KREMLIN'S VIEW OF GLOBAL AND REGIONAL GAS AND ENERGY MARKETS. THE COURSE ENDS WITH AN EXPLORATION OF THE ROLE THAT TRANSIT STATES LIKE BULGARIA PLAY IN GLOBAL ENERGY MARKETS AND EFFORTS BY THESE PLAYERS TO USE THEIR TERRITORY AND ENERGY ALTERNATIVES TO BARGAIN WITH LARGER STATES AT BOTH ENDS OF ENERGY PIPELINES. THROUGHOUT THIS EXPLORATION, STUDENTS WILL BE EXPOSED TO A VARIETY OF STAKEHOLDERS AND A GAIN AN UNDERSTANDING OF ENERGY'S IMPACT ON DOMESTIC AND INTERNATIONAL POLITICS, ECONOMIES, SOCIETIES AND THE ENVIRONMENT.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PS 1302 - POLITICAL DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course will examine the major problems involved in the study and understanding of change in "less developed countries," the main approaches and theories applied to these problems, and the criticisms directed at some of these approaches. In particular, it will consider attempts to understand "development" by reference to the earlier experiences of Europe and the United States and will evaluate the relevance of such an approach to the current problems of the underdeveloped world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Writing Requirement Course

PS 1303 - EACE MOVEMENTS AND PEACE EDUCATION

Minimum Credits: 3
Maximum Credits: 3
This course focuses on two major components in the field of peace studies; peace movements and peace education. Key concepts (e.g., peace, war, violence, conflict, justice, equality, democracy, and citizenship) and theories are discussed. Movements for (inter-personal, inter-group, and international) peace initiated by people in the united states and other countries historically and today will be analyzed. School-, University-, and community-based peace education programs developed in various countries will also be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1309 - COMPARATIVE REGIONALISM (EUROPE AND ASIA)

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the politics of Asia by examining and comparing the political systems, economic performance, civil society, and the effect of globalization among countries of East- and South-East Asia. Particular attention will be given to Asian regionalism, focusing on regional powers and their efforts in promoting regional cooperation and integration. The course offers an overview of Asian regional cooperation mechanisms (ASEAN and ASEAN+, East Asia Summit, ARF) as well as current thematic issues such as Asian integration, contemporary Asian nationalism, and state-centered capitalism. Through the use of contemporary film and media, students will be engaging in discussions on Asia and its impact on the future of the international order.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1311 - WESTERN EUROPEAN GOVERNMENT AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course covers the politics and government of Western European countries at the national and local levels. It also considers some aspects of the relationships between the European Union and its member states.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

PS 1314 - GERMAN GOVERNMENT AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course examines political institutions and developments in Germany following the second World War, first tracing them through the eras of postwar occupation, Cold War partition and consolidation of the two German states, through the East German revolution of 1989 that set the state for unification. The course will pay special attention to the domestic and international public policy challenges facing post-unification Germany.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1316 - ASIAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the politics of Asia by examining and comparing the political systems, economic performance, civil society, and the effect of globalization among countries of East- and South-East Asia. Particular attention will be given to Asian regionalism, focusing on regional powers and their efforts in promoting regional cooperation and integration. The course offers an overview of Asian regional cooperation mechanisms (ASEAN and ASEAN+, East Asia Summit, ARF) as well as current thematic issues such as Asian integration, contemporary Asian nationalism, and state-centered capitalism. Through the use of contemporary film and media, students will be engaging in discussions on Asia and its impact on the future of the international order.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1317 - POLITICS OF THE EUROPEAN UNION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the government and politics of the European Union. It will provide a historical overview of the creation of the EU and development of European integration and introduce students to the EU's governing institutions, current policies and debates, and the public's views of the EU through public opinion and electoral politics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, West European Studies

PS 1318 - EUROPEAN GOVERNMENT AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course will encompass the comparative study of the political systems of Western Europe including the UK, France, Germany, Italy, Spain, Poland, and Scandinavia. The primary themes will include political development and institutions, security, European integration, political culture, political economy, and democratization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1321 - LATIN AMERICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course compares and contrasts the governments and political processes throughout Latin America. It offers a detailed look at several countries, and also provides a comparative framework to discuss the rise, fall, and quality of democracy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1322 - LATIN AMERICAN POLITICAL DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
In this course we will address the following puzzle: why was it so difficult to build stable democracies in Latin America during the twentieth century? We will use the analytical tools provided by political science to illuminate the political history and the current situation of Latin America. Some of the topics that we will deal with in this course are: institutional arrangements, economic policy, and role of the military, elections, and political and social equality. Most of the course we will focus on thematic material using comparative analysis. However, we will also study four Latin American countries in greater detail.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1324 - US-LATIN AMERICAN RELATIONS

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the history, politics, and legitimacy of US policy towards Latin America. How have these relations changed over time? What have been the consequences for the US or for the Latin American countries? What interests and structures have driven us decisions?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1326 - EAST ASIAN POLITICAL ECONOMY 1950-PRESENT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1327 - POLITICS OF REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
Politics is often about conflict, but sometimes that conflict takes place within legislative bodies and other times in the streets. Most of what we study in political science courses focuses on conflict within the electoral framework, but this course asks what happens when citizens take conflict into their own hands. This course will examine the conditions that prompt people to organize on behalf of their collective interests, how protest movements evolve, and under what conditions they succeed. The first half of the class will cover theoretical topics: the causes, strategies, and consequences of protest activity. The second half of the class will focus on types of protest (political protests, revolutionary movements, social movements, riots, and guerrillas) through comparative case studies. Most case studies in class will be based on examples within the Western hemisphere (North, central, South America, and the Caribbean) - a geographical region with an enormous variety of types, causes, and consequences of protest movements - but students will be encouraged to become independently familiar with protest movements around the world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1328 - AUTHORITARIAN STATECRAFT AND THE ARTS OF RESISTANCE

Minimum Credits: 3
Maximum Credits: 3
According to the democracy index, only 19 countries are "full democracies," housing only 13% of the world's population. Countries like Japan and the United States are considered "flawed democracies" while the majority of the world's political systems are either "hybrid" or "authoritarian." Therefore, if we want to truly understand politics, it is essential that we understand politics in non-democracies, or political systems conventionally referred to as "authoritarian regimes." This course invites students to think critically about the nature of authoritarian political systems. We will examine how society and politics are organized in authoritarian systems and how individuals experience power and authority in these societies: historical and contemporary.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1330 - EUROPEAN UNION SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course will focus on various topics related to the European Union. Students will have the opportunity to engage in an individual or group research project on a topic of their choosing related to the EU/Europe.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, West European Studies

PS 1332 - GOVERNMENT AND POLITICS IN CONTEMPORARY CHINA

Minimum Credits: 3
Maximum Credits: 3
An introductory analysis of contemporary Chinese politics. Topics to be considered include the traditional background, the Chinese revolution, the role of revolutionary ideas and institutions in Chinese political life since 1949, recent and current policy issues, and possible future trends.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1333 - GOVERNMENT AND POLITICS OF JAPAN

Minimum Credits: 3
Maximum Credits: 3
This course considers postwar Japanese government and politics in comparative perspective. Topics to be covered include the following: the American occupation, Japanese society, political culture, election system and election campaigns, government and political leader ship, the ruling party, opposition parties, protest movements, the parliamentary and policymaking processes. Frequent comparisons will be made between the Japanese system and other democratic systems in North America and Europe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

PS 1336 - BUSINESS AND POLITICAL ECONOMY IN MODERN CHINA

Minimum Credits: 3
Maximum Credits: 3
The program will focus on how contemporary china handles conflict and opportunity between its culture and tradition on the one hand, and modernization and Western influence on the other.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

PS 1338 - POLITICS IN DEVELOPING COUNTRIES

Minimum Credits: 3
Maximum Credits: 3
This course explores the question of why it is so hard for many under-developed countries to overcome persistent problems of poverty, bad governance, and civil conflict. We will explore the politics of under-development, looking at the role of geography, institutions, historical legacies of slavery and colonialism, corruption, natural resources, ethnic divisions, and international aid. The course will take us to virtually every part of the globe, from Africa to Latin America to Asia to Europe and the United States.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1339 - SCIENCE AND PUBLIC POLICY IN THE US AND EUROPE

Minimum Credits: 3
Maximum Credits: 3
Public policy influences almost every aspect of our daily lives, from the food we eat, the air we breathe, to the products we buy. In this class, we compare the public policy process in the US and the EU on important and current public policy debates. We examine a range of science-related topics that, depending on the semester, include the following: genetic modified organisms, the use of pesticides in agriculture, food labeling, climate change, etc. This class is open to students from all majors, and may be of particular interest to pre-health students, stem students, as well as political science majors and students completing certificates from the European union studies center.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1341 - GOVERNMENT AND POLITICS USSR/RUSSIAN FEDERATION

Minimum Credits: 3
Maximum Credits: 3
A survey of the political systems in the USSR (1917-1991) and its major successor, the Russian Federation (1991-present). The first section deals with the period from the Bolshevik Revolution in 1917 until the mid-1980s. The second section examines the efforts to reform the political system under general Secretary Gorbachev. The final section deals with the collapse of the USSR in 1991 and the subsequent development of the Russian Federation as an independent state.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1345 - POLITICS OF OCEANIA

Minimum Credits: 3
Maximum Credits: 3
This course examines the government and politics of Australia and Australian engagement in the Asia-Pacific region. It does so by surveying similarities with and differences from the North American democratic model and by examining Australia's substantial and abiding interests in the Asia-Pacific region. By the end of course, students will be aware of the importance of geographical distance and location in the australian story. Students will also be aware of the continuing importance of cultural and political inheritance in the development of Australian public and foreign policy. Students will be encouraged to make comparisons with the US system of government and politics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PS 1348 - XENOPHOBIA IN MODERN EUROPE

Minimum Credits: 3
Maximum Credits: 3
This course will examine Europe's post-war xenophobic, racist and exclusionary policies. We will use memoirs, photo journalism, film and interviews to understand recent discrimination against refugees, guest workers, Jews, linguistic and religious minorities. We will also put the question into scholarly context, as we examine how historians, sociologists, psychologists and anthropologists try to understand the way in which Europeans construct the categories of "us" and the "others".
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

PS 1349 - TRANSATLANTC GOVERNANCE AND POLICY

Minimum Credits: 3
Maximum Credits: 3
The economic, political and defense links between North American countries and European countries, and especially the European Union, generate important governance and policy issues. This course examines those issues in light of general theories of governance at the national and international levels. Special attention will be given to on-going trade negotiations and climate change policy.

Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

PS 1351 - GOVERNMENT AND POLITICS OF THE MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3
A survey of the developing political systems of the Middle East and their positions in world affairs. Considered are the growth of political institutions in the modern era, the nature of political leadership, the evolution of political attitudes, and the legacy of Western and Soviet imperialisms. The states dealt with are Iran, turkey, Iraq, Lebanon, Jordan, Syria, Egypt, and Israel. The course includes a diplomatic simulation exercise designed to illustrate the complexity of foreign policy interactions in the region.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1352 - INTRODUCTION TO AFRICAN POLITICS

Minimum Credits: 3
Maximum Credits: 3
A general introduction to African politics at macro level for freshmen and sophomores with special focus on traditional African political system, European imperialism in Africa, African nationalism, independence and post-independence problems of nation-building and economic development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1357 - THE POLITICS OF FOOD, LAND, AND SUSTAINABILITY

Minimum Credits: 3
Maximum Credits: 3
The debates surrounding food and agricultural land are often seen as scientific and outside the realm of social scientists. Yet many of the key decisions regarding food production, distribution, and consumption are decidedly political. This course provides students with the concepts and theories necessary for understanding and analyzing the various policies and proposals put forth by food producers, consumer groups, politicians, government regulators, and other food-related interest groups. This course is based on the premise that rational and desirable policy goals for any society are to create and maintain food systems that promote health, protect the environment, are sustainable, and support the livelihoods of participants, but that powerful forces in society including large businesses seeking profits and school boards protecting budgets may oppose this premise in theory or practice. Hence: politics. The course considers how the U.S. and other governments develop policies aimed at ensuring a sufficient, nutritionally adequate, safe, affordable, and sustainable food supply. Drawing on contemporary case studies, it examines: why and how governments establish food and nutrition policies; how stakeholders in the food system use the political system to influence policy; the cultural, social, economic, and political factors that influence stakeholder and government positions on policy issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1358 - AFRICAN INTERNATIONAL RELATIONS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Global Studies

PS 1359 - EU INTERNATIONAL LAW PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1361 - COMPARATIVE POLITICAL PARTY SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
This course compares the political party systems, electoral processes, and other institutions of governance in four or more countries, which vary by instructor and term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

PS 1364 - CLIMATE CHANGE & PUBLIC POLICY IN EUROPE AND THE US

Minimum Credits: 3
Maximum Credits: 3
Climate change is one of the most difficult problems faced by humankind. We are all causing and suffering from it to varying degrees. As a result, some have labeled it a "super wicked problem." the politics underlying climate change are complex and therefore particularly interesting. In the first part of this course, we will analyze what policymaking really is: how does it work? How are policies designed? Where is policymaking the most effective? In the second part, we will study the determinants of climate policy in Europe and elsewhere. Specifically, we will investigate the role played by public opinion, political leaders, bureaucracies, scientists, and interest groups. The last part of this course evaluate the effectiveness of actual policies designed to solve climate change. We will examine a broad range of policies ranging from carbon taxes to technology transfers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1368 - US-LATIN AMERICAN TRAILER-SPANISH LANGUAGE DISCUSSION GROUP

Minimum Credits: 1
Maximum Credits: 1
This one-credit optional discussion course will allow students to discuss issues from PS 1324, US-Latin American relations, in Spanish. As such, it will discuss both historical and contemporary issues, but the discussion will emphasize current events.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

PS 1371 - ISLAM, LAW, AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1373 - WELFARE STATE IN COMPARATIVE PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
Starting from the mid-nineteenth century the course is an historical and political critique of the main theories of divided equally between the diverse origins of the British, French, Swedish and German welfare states in the nineteenth century; the impact of new social theories and social thought on the design of welfare states early in the century and between the wars; and how the organization and structure of welfare states following the war was influenced by this experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1375 - RELIGION AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course discusses religion and politics, especially in its contemporary dimensions. Taking a comparative focus that will change from term to term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1378 - BUILDING DEMOCRACY AROUND THE WORLD

Minimum Credits: 3
Maximum Credits: 3
Developing a new democracy is a process, with at least two main parts. First the country must move away from authoritarian rule. The first part of the course, therefore, will examine why (or why not) countries make that transition and how they do so. The second part of the course will then examine why some countries are more successful in their transition, based on an examination of civil society and the types of political institutions (such as political parties, the executive system, and the judiciary) that countries develop. What influences these choices and how do these choices affect success and stability of the new democracy? Has international aid been successful in helping countries develop democratic practices?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1381 - CAPSTONE SEMINAR IN COMPARATIVE POLITICS

Minimum Credits: 3
Maximum Credits: 3
Capstones are writing intensive courses for senior, PS majors. Subject matter will vary from term to term depending on the interests, area of expertise, and inclinations of the particular instructor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: PS 0300; PLAN: Political Science (BA or BS or BPH); LVL: Sr; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Global Studies, West European Studies, Writing Requirement Course

PS 1383 - POLITICS OF CONTEMPORARY MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3
The main emphasis of the course will be on conflict and conflict resolution in the Middle East. Conflict has been a constant feature of the region since 1945. This course will be primarily concerned with how and why these conflicts are generated, escalate, become protracted, and are resolved.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1384 - TOPICS IN COMPARATIVE POLITICS

Minimum Credits: 3
Maximum Credits: 3
EU international Law Perspective AT A TIME WHEN THE EUROPEAN UNION FACES AN EXISTENTIAL CRISIS AND A SERIOUS MULTI-DIMENSION DISINTEGRATION THREAT (AS EVIDENCED, FOR INSTANCE, BY THE WITHDRAWAL OF EXISTING MEMBERS AND THE POSSIBLE COLLAPSE OF COMMON POLICIES), UNDERSTANDING THE EU AND ITS IMPACT ON THE INTERNATIONAL ARENA SEEMS MORE IMPORTANT THAN EVER. TOO OFTEN, EVEN IN EUROPE, THE HISTORY OF THE EU, THE LEGAL INFRASTRUCTURE OF THE EUROPEAN PROJECT OF INTEGRATION AND THE EFFECTS OF HARMONIZATION/UNIFICATION OF THE LEGAL SYSTEMS OF THE MEMBER STATES BY THE EU REMAIN UNKNOWN TO MANY. FROM AN EUROPEAN PERSPECTIVE, THIS IS DETRIMENTAL TO FEELING EUROPEAN, GIVES RISE TO MISLEADING INFORMATION AND CONSTITUTES THE BREEDING-GROUND OF POPULIST POLITICAL NARRATIVES. CONVERSELY, FROM AN NON-EU PERSPECTIVE, THIS LACK

OF KNOWLEDGE PREVENTS NON-MEMBER STATES TO CONSIDER THE EU AS A POSSIBLE GEO-POLITICAL MODEL OR AS AN EXPORTER OF REGULATORY STANDARDS AND, MOREOVER, LIMITS THE POSSIBILITY OF NON-MEMBER STATES TO UNDERSTAND THE LEGAL FRAMEWORK THAT GOVERNS ONE OF THE LARGEST ECONOMY OF THE WORLD. THE PROPOSED COURSE, ADDRESSED BOTH TO UNDERGRADUATE AND LAW STUDENTS, INTENDS TO INTRODUCE STUDENTS TO THE EU AND ITS POLICY FRAMEWORK FROM AN INTERNATIONAL LAW PERSPECTIVE. ON THE ONE HAND, IT AIMS AT PROVIDING THEM WITH A BASIC BUT CRITICAL UNDERSTANDING OF THE HISTORICAL, INSTITUTIONAL, CONSTITUTIONAL AND SUBSTANTIVE DIMENSION OF THE EU AND OF THE SUI GENERIS CHARACTER OF THE UNION LEGAL ORDER VIS-À-VIS INTERNATIONAL LAW. ON THE OTHER HAND, IT STRIVES TO EXPLORE THE FUNDAMENTALS OF EU BUSINESS LAW WITH THE AIM TO ANALYZE THE LEGAL CHALLENGES THAT A NON-MEMBER STATE BUSINESS COULD FACE WHEN ENTERING THE EU MARKET. THE FIRST PART OF THE COURSE WILL PROVIDE STUDENTS WITH A GENERAL INTRODUCTION ON THE EU AND EU LAW. AFTER A SYNOPSIS OF THE HISTORY, THE INSTITUTIONAL STRUCTURE AND THE COMPETENCES OF THE EU, THE COURSE WILL FOCUS ON THE SOURCES AND THE PRINCIPLES OF EU LAW AND ON ITS STATUS WITHIN THE LEGAL SYSTEMS OF MEMBER STATES. ATTENTION WILL ALSO BE DEVOTED TO THE CRUCIAL ASPECT OF ENFORCING EU LAW BY BOTH EU AND NATIONAL LEVEL INSTITUTIONS AND TO THE KEY FEATURES OF SUBSTANTIVE EU LAW, WITH A PARTICULAR EMPHASIS ON THE FOUR FREEDOMS AND ON EU COMPETITION LAW. THE SECOND PART OF THE COURSE WILL EXAMINE THE (AT TIMES TORMENTED) RELATIONSHIP BETWEEN EU LAW AND PUBLIC INTERNATIONAL LAW. FOLLOWING A CONCISE ILLUSTRATION OF THE BASIC FEATURES OF PUBLIC INTERNATIONAL LAW, THE STATUS OF THE EU AS A (SUI-GENERIS) LEGAL ORDER AND THE RISING ROLE OF THE EU AS A CO-CREATOR OF THE INTERNATIONAL LEGAL ORDER WILL BE ANALYZED. THE THIRD PART OF THE COURSE WILL DEAL WITH THE FUNDAMENTALS OF EUROPEAN BUSINESS LAW IN AN INTERNATIONAL SETTING. SUBJECTS COVERED WILL INCLUDE JURISDICTION AND CHOICE OF LAW IN CIVIL AND COMMERCIAL MATTERS, CONSUMER PROTECTION IN EUROPEAN LAW AND THE IMPACT OF EU LAW ON INTERNATIONAL COMMERCIAL ARBITRATION. THIS DESCRIPTION CHANGES EVERY TERM DEPENDING ON THE INSTRUCTOR. THIS DESCRIPTION IS FOR THE SPRING TERM 2184.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies

PS 1386 - POLITICS OF LEADERSHIP

Minimum Credits: 3
Maximum Credits: 3
The life and work of every politician and statesman is a unique story, which can illustrate much about extremely complex and convoluted nature of politics. This course will study some of the key politicians and statesmen of the 20th and 21st centuries as the positive and negative examples of political leadership. Moreover, relying on the vast scholarly literature on this subject, the course will review different types of leadership (charismatic, institutional, hereditary, and others) in different political systems and regimes (authoritarian, liberal-democratic, and monarchial) and very importantly, will focus on leadership personalities, tactics, techniques and skills in order to fully dissect and understand the key characteristics of good and bad, effective and ineffective leadership.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1387 - POLITICS OF WATER

Minimum Credits: 3
Maximum Credits: 3
Given the need to highlight the contributions political science offers to our study of the Anthropocene, this interdisciplinary course investigates the role of water in the political development of contemporary Central Eurasia. As a landlocked world region, Central Eurasia provides a compelling case for the study of the political, social, and technological innovations that has yielded sites of ecological disaster and environmental frontiers of opportunity. This course guides students through the key stages of Soviet political change and its impact on the issues of Central Eurasian water culture: the collapse of tsarist governance and the withdrawal of its engineer-specialists, ending its "civilizing mission"; the arrival of US experts whose modern irrigation methods inadvertently contributed to environmental degradation and economic dependence; the "shock" construction sites of the Stalin era; the misguided dam-building projects of the late Soviet period; and finally the issues relating to the international cooperation to manage the river basins connecting Kyrgyzstan, Tajikistan, Uzbekistan, Turkmenistan, and Kazakhstan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Social Science General Ed. Requirement

PS 1389 - RUSSIAN AND EAST EUROPEAN STUDIES MINI-COURSE

Minimum Credits: 1
Maximum Credits: 1

An intensive program that takes Pitt students to Washington DC during Spring Break, to meet with Central Asian diplomats, water issues policy makers, federal agencies (including the State Department and the Bureau of Indian Affairs), and lobbyists. The course will provide students with a set of experiences and contacts in understanding the water issues on a global scale as well as the particular concerns of water in Central Asia.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

PS 1391 - AUTHORITARIAN STATECRAFT AND THE ARTS OF RESISTANCE - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
According to the democracy index, only 19 countries are "full democracies," housing only 13% of the world's population. Countries like Japan and the United States are considered "flawed democracies" while the majority of the world's political systems are either "hybrid" or "authoritarian." Therefore, if we want to truly understand politics, it is essential that we understand politics in non-democracies, or political systems conventionally referred to as "authoritarian regimes." This course invites students to think critically about the nature of authoritarian political systems. We will examine how society and politics are organized in authoritarian systems and how individuals experience power and authority in these societies: historical and contemporary. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1392 - EUROPEAN POLITICS-ANALYSIS IN COMPARATIVE POLITICS

Minimum Credits: 3
Maximum Credits: 3
This class takes a comparative approach to studying the political systems of Europe and the European Union and the current policy issues facing both European governments and their citizens. Students will also learn how to use, interpret and present data relating to these topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1399 - ANALYSIS OF COMPARATIVE POLITICS

Minimum Credits: 3
Maximum Credits: 3
This class focuses on significant training in a specific analysis method or methods to complement the study of Comparative Politics, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1450 - TOPICS IN POLITICAL SCIENCE

Minimum Credits: 3
Maximum Credits: 3
An advanced study of a specific topic in political science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1501 - THEORY OF INTERNATIONAL RELATIONS

Minimum Credits: 3
Maximum Credits: 3
This course explores central concepts and theories employed by political scientists to explain how world politics functions. You will be introduced to theoretical orientations such as realism, institutionalism, and constructivism, and we will discuss how constructs such as power, interests, identity, legitimacy, and order provide insight into political behavior. Much of the material examined in the course is abstract and you will need to think carefully about how the various concepts and arguments can be integrated. By the end of the course, you should have developed a relatively sophisticated conceptual framework with which to analyze events in world politics.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PS 0500
Course Attributes: DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1502 - INTERNATIONAL LAW AND PROBLEMS OF WORLD ORDER

Minimum Credits: 3
Maximum Credits: 3
This course considers the role of international law in efforts to solve some current problems of world order. These problems include the control of violence, i.e., The problems of collective security, arms control and disarmament, intervention and nuclear proliferations; human rights; problems of economic and social development; managing global resources; and protecting the global environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1503 - INTERNATIONAL ORGANIZATION

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the interplay among states, intergovernmental organizations, civil society organizations, and multinational corporations. Cases are drawn from a broad range of issue areas, including economic relations, human rights, peace and security, and the environment. The objective is to better understand the dynamics and evolution of formal and informal international institutions and what difference they make, in light of globalization and emerging geopolitical changes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

PS 1504 - NATIONALISM

Minimum Credits: 3
Maximum Credits: 3
Theories of nationalism, ethnicity, and race are examined and are contrasted with theories of modernization and socialism. Particular emphasis is placed on ethnonationalism in developed Western countries, such as Britain, France, Spain, Belgium, and Canada, and on ethnic politics in the U.S. Comparisons are drawn with nationalism in other types of political systems, particularly the USSR, Yugoslavia, and selected Middle East and African countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

PS 1508 - INTERNATIONAL TERRORISM

Minimum Credits: 3
Maximum Credits: 3
Terrorism has gone from a relatively marginal security concern to one of the thorniest security issues in international politics. Indeed, today there are few countries that do not suffer from some form of terrorism. And terrorist groups such as the Islamic state in Syria pose significant challenges for the international community. This course aims to introduce students to main debates surrounding terrorism. The course will deal with questions regarding the definition of terrorism, its causes and historical evolution, the relationship between insurgency and terrorism, the organizational structure of terrorist groups and the tactics they use. We will also analyze counter-terrorism and the factors that influence its effectiveness. Throughout the course, we will have a chance to take a closer look at some of the terrorist groups such as Al-Qaeda, Islamic state, Hamas, ETA, Tamil Tigers, among others. In the last part of the course, we will deal with the rise of domestic terrorism in the U.S.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

PS 1509 - CONFLICT AND WAR THEORY

Minimum Credits: 3
Maximum Credits: 3
The primary objective of this course is to introduce the student to theoretical arguments and empirical evidence concerning the sources of conflict and war in human society, particularly within the international arena. Reading material will be drawn from a number of disciplines, including psychology, sociology, history and political science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, West European Studies

PS 1510 - COLDWAR:SOVIET UNION AND WEST 1917-91

Minimum Credits: 3
Maximum Credits: 3
This course is designed to help students understand the central question in world politics during much of the 20th century-the relationship between the West and the Soviet Union from 1917 to 1991. The course surveys the Western response to the formation of the USSR as the first "socialist" state and to the international communist movement which developed under its leadership from 1917 to 1991.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Russian & East European Studies

PS 1511 - AMERICAN FOREIGN POLICY

Minimum Credits: 3
Maximum Credits: 3
Provides a historical survey of American foreign policy from the end of World War II until the present, an analysis of the decision making process led by the president of the United States, and a discussion of the impact of both the international political system and American domestic politics on this process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

PS 1512 - INTERNATIONAL MIGRATION IN THE 21ST CENTURY

Minimum Credits: 3
Maximum Credits: 3
This course addresses some of the central questions surrounding current debates about immigration in the United States and Western Europe, including: Why do people move across international borders, and where do they go? What are the consequences of migration for the sending and the receiving countries? How do local communities, national governments, and international institutions respond to migration (including "illegal" migration)? This course aims to provide students with the theoretical and empirical knowledge needed to grapple with these questions intelligently.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

PS 1513 - FOREIGN POLICIES--CHANGING WORLD

Minimum Credits: 3
Maximum Credits: 3
The aim of this course is to introduce students to the analysis of foreign policy as a form of political behavior and to the specific factors influencing the foreign policies of several of the world's most powerful states. The lectures and readings follow several intertwining themes, covering: 1) the conceptual and analytical tools utilized to investigate and compare the foreign policies of states; 2) the nature of certain phenomena which present countries with complex and dangerous international problems, e.g. security, interdependence; 3) the particular sources, processes and outcomes involved in the foreign policies of several states including the United States, Russia and others. The approach is analytical and though some of the readings and lectures are historical, the emphasis is on the contemporary context. It is also comparative, offering students a look at how these states' domestic culture, processes and institutions affect their foreign policies. (International relations field)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

PS 1514 - POLITICAL STRATEGY INTERNATIONAL RELATIONS

Minimum Credits: 3
Maximum Credits: 3
Strategic interdependence dominates international relations - how one state behaves not only affects its own outcomes but other states' outcomes as well. Game theory has become a primary method of studying strategic interdependence. This class offers a brief primer in elementary game theory and then surveys the major formal findings in international relations, with focuses on explanations for war and design of international institutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Quant.-Formal Reason General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1516 - TRANSATLANTIC POLICY ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This new skills based course aims to provide students with crucial analytical and professional skills pertinent to the transatlantic policy world. Among them are: to read analytically and critically and to speak knowledgeably about a range of transatlantic issues that concern political scientists and policy makers, including immigration, environmental protection, social policies, and trade and economic development; and to communicate such policy analysis in a clear and persuasive manner accessible to a wide range of policy focused audiences at the international and national levels.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1517 - US FOREIGN POLICY TOWARD THE MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3
The purpose of the course is to have students use a conceptual framework to analyze U.S. foreign policy towards the Middle East. They will do this within the context of the various traditions that have given direction to U.S. foreign policy conduct over the ages. As part of this, students will analyze U.S. policy towards the Middle East since the Cold War, and then use this as an historical backdrop for looking at different foreign policy options towards this tumultuous region for the future. The class will help develop the students' conceptual understanding of the complexities of foreign policy-making and enable them to tease out pertinent trends and patterns that otherwise might seem elusive. They will also get a grounding in how to conduct high level foreign policy analysis and gain an understanding of the foundations of strategy and its application in U.S. foreign policy towards the Middle East.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1518 - GERMANY AND EUROPE: A FOREIGN POLICY TRANSFORMED

Minimum Credits: 3
Maximum Credits: 3
This course explores continuity and change in the foreign policy of Germany ' the largest, wealthiest, and arguably most influential European union member state ' from state unification through the present era. (International relations field)
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1521 - EASTERN EUROPE IN WORLD POLITICS

Minimum Credits: 3
Maximum Credits: 3
Eastern Europe has now seen more than twenty years of dramatic changes encompassing a movement away from one-party dictatorship and state-run economies to democratic politics and market economies. These changes have affected and been affected by developments in Europe, including Russia, Euro-Atlantic relations and international relations more broadly. The aim of this course is to explore the background and dynamics of the remarkable changes in "the other Europe." The course will move quickly over the history of the region generally referred to as "East Europe" and will focus primarily on contemporary developments. A particular focus of the course is the impact on the region of developments elsewhere, especially in the politics and policies of outside powers, and the ripple effect of changes in the region on European and world politics.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

PS 1523 - EAST ASIA IN WORLD POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course focuses on how the peoples and states of East Asia are affected by and in turn influence the world environment. Students examine the modern history of the region, which is crucial to understanding the contemporary situation. The doctrines that affect governance and international affairs in the region are also examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1531 - NATIONAL SECURITY POLICY

Minimum Credits: 3
Maximum Credits: 3
National security is becoming a crucial issue with an impact both in the international system and in the domestic environment. This course will discuss the different approaches to national security and the policies through which they have been implemented, such as military buildup, political and military alliances, military and economic consequences, and nuclear policies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1533 - POLITICAL VIOLENCE AND REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the conceptual parameters of political violence, its various forms and understanding these phenomena by studying the diverse range of violent conflicts in South Asia. It explores the colonial legacy in the subcontinent and, the political character of the state for explaining the genesis and nature of different conflicts and asks why only certain conflicts become violent and how? Students will also learn about different strategies adopted by states for coping with such violent conflicts. These issues will be examined in a comparative framework and as part of the course work, students will be encouraged to undertake some case studies of conflicts to understand 'what works' and 'what doesn't' in managing or ending political violence and, resolving such conflicts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PS 1534 - CIVIL WARS

Minimum Credits: 3
Maximum Credits: 3
This course explores why peace sometimes lasts a long time and sometimes falls apart quickly after Civil Wars. We will examine how the international community deals with civil conflicts and what can be done to ensure a long-lasting peace in war-torn countries. Emphasis will be placed on the factors that increase the durability of peace and aid the establishment of long-term prospects for reconciliation to rebuild societies after wars. Students will gain knowledge of theories that explain whether and how peacekeeping forces, agreement design, power-sharing institutions, mediation, foreign aid, and post-war elections help domestic belligerents reach and keep peace.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1536 - HUMAN SECURITY

Minimum Credits: 3
Maximum Credits: 3
This is a topics course in international relations focusing on the politics of human security. The politics of human security is an area of evolving

interest within the field of international relations. Currently, few political science departments offer courses on the topic and there is little agreement on what should be included in such a course. The general consensus is that 'human security' differs from 'national security' in that the latter is concerned with the well-being of the state, while the former is concerned with the well-being of individuals. In this course, we will focus on how violence, political oppression, poverty, and ecological destruction threaten individual welfare and what the international community is (and is not) doing to address these concerns.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1537 - PEACEMAKING & PEACEKEEPING

Minimum Credits: 3
Maximum Credits: 3
This course explores the conditions that lead to initiation, escalation, and termination of Civil Wars as well as the circumstances that promote or restore peace within states. Why do Civil Wars break out in some countries but not others? Why do Civil Wars last as long as they do? How does the international community help resolve Civil Wars? The ultimate goal of this course is not to examine a particular Civil War in detail but rather to provide a broad theoretical treatment of Civil Wars, and a better understanding of international relations. Upon completion of this course, you should be familiar with the factors that mitigate or exacerbate conflict within states and develop informed insights about the mechanisms of conflict management and resolution.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1538 - THE POLITICS OF OIL AND NATURAL RESOURCES

Minimum Credits: 3
Maximum Credits: 3
Oil has played an incredible role in shaping the domestic and international politics of both producer and consumer countries around the globe. Since commercial production first began in the late 19th century, rising world demand for oil coupled with a geographically concentrated and exhaustible supply has defined the nature of global economic competition, economic and political development within countries and geo-political power struggles between countries. This course aims to shed light on why oil (and related natural resources) has had such a powerful effect on world politics to date and what our dependence on oil might mean for the future.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1541 - POLITICS GLOBAL ECONOMIC RELATIONS

Minimum Credits: 3
Maximum Credits: 3
This course examines the connections between power and wealth, states and markets, and economics and politics in order to gain a better understanding of the political underpinnings of the global economy as well as the influences that international economics has on national and international politics. It is an introduction to what political scientists call international political economy (or simply IPE).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PS 0500 and PS 0700
Course Attributes: DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1542 - GLOBAL ENVIRONMENTAL POLITICS

Minimum Credits: 3
Maximum Credits: 3
In this course we will explore the "politics" of international environmental issues in a way that complements a more scientific-technical treatment of the issues. We will draw upon international relations theories and concepts (e.g. power, dependency, complex interdependence, epistemic communities, regimes, and the logic of collective action) to help us explain environmental politics in the global arena.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1543 - GLOBALIZATION AND INTERNATIONAL POLITICS

Minimum Credits: 3
Maximum Credits: 3
This course examines globalization's political and economic effects on societal welfare around the world. We start by looking at economic globalization historically, comparing the degree and forms of international economic integration during the late 19th century with today. We then consider, in more detail, the domestic consequences of current changes in the international political economy, particularly expanding trade and increased international capital mobility, for both the developed democracies and developing countries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, West European Studies

PS 1555 - GLOBAL STUDIES MINI COURSE

Minimum Credits: 1
Maximum Credits: 1
This mini course will be offered in Fall and Spring terms. The basic descriptions differ in each term and can be found below. Additionally, specific information will be added to the Notes section as it becomes available and edited by individual events and instructors each term. Fall Terms: Global Health: This course engages the interdisciplinary nature of global health by approaching the issue through the lens of the Sustainable Development Goals (SDG) developed by the United Nations. With an applied focus, the course will assist students in engaging and advocating for a community on a global health issue through a policy memo. For more information see the Global Studies web site or contact global@pitt.edu. Spring Terms: Cities in Transformation: This course views cities as hubs where patterns, connections, discussions, and the processes shape such issues as social justice, economic development, technology, migration, the environment among others. By examining cities as a lens, this course encourages students to examine cities as a system for discussing social processes being built and rebuilt. For more information see the Global Studies web site or contact global@pitt.edu.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

PS 1556 - GLOBAL STUDIES POP-UP COURSE

Minimum Credits: 1
Maximum Credits: 1
"In conjunction with its semester-long series on the global legacies of 1989, the University Center for International Studies is pleased to offer students the opportunity to enroll in this 1-credit pop-up course that tracks the series. 1989 changed everything. It opened the door to German re-unification, the European Union, the enlargement of NATO, globalization, two decades of U.S. superpower status, political realignments in Latin America and Africa, and the rise of Asia. This series will explore the impact and global legacies of the Cold War thirty years after the Iron Curtain fell. Students who enroll will attend at least 10 events, one of which must be the concluding roundtable on December 5. In addition, they will write three short reflection essays."
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

PS 1581 - CAPSTONE SEMINAR IN INTERNATIONAL RELATIONS

Minimum Credits: 3
Maximum Credits: 3
Capstones are writing intensive courses for senior, PS majors. Subject matter will vary from term to term depending on the interests, area of expertise, and inclinations of the particular instructor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: PS 0500; PLAN: Political Science (BA or BS or BPH); LVL: Sr; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Global Studies, West European Studies, Writing Requirement Course

PS 1583 - TOPCS IN INTERNATIONAL RELATIONS

Minimum Credits: 3
Maximum Credits: 3
Current topics of interest in international relations. Topics covered vary with instructor and term.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, West European Studies

PS 1584 - GREECE IN ITS NEIGHBORHOOD: EUROPE & EASTERN MEDITERRANEAN

Minimum Credits: 1
Maximum Credits: 1
This course is designed to provide knowledge on contemporary political and economic issues on Greece's agenda with regard to wider Europe including the eastern Mediterranean and the black sea. Greece's politico-economic evolution is profoundly formed by its participation in the European integration process (i.e. The EU) and by dynamics in the Mediterranean and especially in Europe's southeastern front where it is itself located. The course offers an opportunity for students interested in politics, economics, history or sociology to learn about the main issues facing present day Greece in tandem with the EU and its other immediate neighbors. In the last century or more as mark Mazowe has put it recently 'Greece's has been at the forefront of Europe's evolution'.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

PS 1587 - U.S. FOREIGN POLICY IN AFRICA

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the increasing engagement of the United States in Africa from the late 19th century until the present. Using a case study approach, students will analyze American foreign policy in Africa and explore the varied effects of those policies. These case studies will include the political realities of decolonization, the cold war, and economic aid and the social and cultural ties of black Americans to Africa. The course will identify specific crises in American and African history as focal points for study, but will also provide a larger narrative about American involvement in both the colonial and post-colonial development of Africa.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

PS 1591 - CONFLICT AND WAR - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
The primary objective of this course is to introduce the student to theoretical arguments and empirical evidence concerning the sources of conflict and war in human society, particularly within the international arena. Reading material will be drawn from a number of disciplines, including psychology, sociology, history and political science. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1592 - POLITICS OF GLOBAL ECONOMIC RELATIONS - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course examines the connections between power and wealth, states and markets, and economics and politics in order to gain a better understanding of the political underpinnings of the global economy as well as the influences that international economics has on national and international politics. It is an introduction to what political scientists call international political economy (or simply IPE). This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1599 - ANALYSIS OF INTERNATIONAL RELATIONS

Minimum Credits: 3
Maximum Credits: 3
This class focuses on significant training in a specific analysis method or methods to complement the study of International Relation, as well as

satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1601 - ANCIENT AND MEDIEVAL POLITICAL THOUGHT

Minimum Credits: 3
Maximum Credits: 3
This course surveys the work of major thinkers in the Western political tradition from ancient Greece through the middle ages, such as Plato, Aristotle, Augustine, Aquinas, and others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PS 1602 - EARLY MODERN AND ENLIGHTENMENT POLITICAL THOUGHT

Minimum Credits: 3
Maximum Credits: 3
This course surveys the work of major thinkers in the Western political tradition from the early modern period through the enlightenment, such as Machiavelli, Hobbes, Locke, Rousseau, and burke.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

PS 1603 - MODERN AND CONTEMPORARY POLITICAL THOUGHT

Minimum Credits: 3
Maximum Credits: 3
This course provides a three-part introduction to modern and contemporary political thought with a focus on identity and identity politics. The first third of the course will explore major modern and contemporary theories about how identities are formed and experienced. The second portion of the course will focus on the relationship between identity and law. The final third of the course will use case studies from U.S. history and current events to explore how identity shapes and is shaped by social movements and public policy. Throughout the semester, students will develop a research project that uses the case of their choosing to explore the ways in which identity affects and is affected by the political world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PS 1604 - MYTH, PROPAGANDA, AND THE STATE

Minimum Credits: 3
Maximum Credits: 3
This course focuses on a single notion: that states use narrative(s) to support their regimes. The class aims to prepare students for understanding how story, myth, propaganda, and indoctrination are used by various political actors to build, sustain, and/or destroy regimes. The course begins with a consideration of quintessential cases of states engaging in these practices (ancient Rome, fascist Italy, imperial Japan, and Cambodia under the Khmer Rouge). It then examines parallel examples within united states history and narratives. The second half of the course then focuses on the practice of propaganda specifically, considering its modern origins in WWI, examining transitions in technique across multiple states, weighing linkages to advertising and public information campaigns, and finally having students construct their own propaganda. The course concludes with a formal content analysis training focused on a particular vein of propaganda, and an assignment that has students blending content analysis consideration with political theory argument construction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1607 - AMERICAN POLITICAL THOUGHT

Minimum Credits: 3
Maximum Credits: 3

This course provides a survey of American political thinking from the founding to the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PS 1612 - MARXISM

Minimum Credits: 3
Maximum Credits: 3
This course is concerned with Marxist political theory, with some attention to related philosophical and historical issues as well. Approximately two thirds of the course will be devoted to analysis of the original sources of Marxism-the writings of Marx and Engels; the remainder will consider various developments in the theory of Marxism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1614 - THEORIES OF JUSTICE

Minimum Credits: 3
Maximum Credits: 3
This course addresses the key intersection between two important topics in contemporary political theory: justice and globalization. The first half of the course will cover the highly influential works of John Rails as well as reactions from Robert Nozick, Onora O'Neill, and Susan Moller Okin. The second half of the course will weave in the issue of globalization to questions of justice 'again using rails' work and various respondents as a vehicle for doing so. The course ends with a significant applied project on the intersection of globalization and justice that will challenge students to consider the current state of justice in a particular global case of their choosing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PS 1619 - DEMOCRATIC THEORY

Minimum Credits: 3
Maximum Credits: 3
Democracy is a centrally important concept in political science. Those who wish to study almost any aspect of politics ' from election campaigns to domestic policy processes to international relations ' will, at some point, be expected to articulate a theory of democracy. Even those who study authoritarian regimes often use democratic regimes as counterpoint examples. In short, a well-rounded political scientist must know something about both democratic institutions and democratic theory. This course aims to provide students with an appreciation of the varieties of democratic thought, a knowledge of the great debates in the field, and a sense of how democratic ideals have been approximated in institutional forms.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1622 - FEMINIST POLITICAL THOUGHT

Minimum Credits: 3
Maximum Credits: 3
This course considers the essential three waves of feminist political thought in Western tradition. The course moves from early feminist theorists to modern concerns and questions over whether the third wave of political feminism is still going strong or it is more helpful to discuss a "fourth wave" of feminism. The course concludes with a project for students to explore how to tackle real political gender norms in an applied fashion, generating theoretically-grounded policy and behavioral changes for the world around them.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

PS 1629 - TOPICS IN POLITICAL THEORY

Minimum Credits: 3
Maximum Credits: 3
This course focuses intensely on a specific topic or problem in political theory; topics vary by instructor and term.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1661 - GAME OF THRONES AND POLITICAL THEORY

Minimum Credits: 3
Maximum Credits: 3
This course considers George R.R. Martin's popular "song of fire and ice"/"game of thrones" series in a political context. The class will consider the way that the series speaks to and shapes political attitudes and beliefs, as well as the way that martin's creative vision was formed by reference to history and politics. The course will begin with reading martin's own writing: the book game of thrones. Then it will explore the historical inspiration of the series, the wars of the roses, and some of the political theory that was created in reaction to that period. Following that, it will cover a few critical political theorists whose works focus on narratives about power, deception, and authority (the core themes of the series). Students in the class will gain exposure to Machiavelli, Locke, de Montesquieu, and Arendt in the course of this consideration, while also getting a chance to understand and discuss the popular books and television show in academic and sustained fashion. As a note, prior reading or viewing of the series is not required, nor necessary, though it will be helpful (and a spoiler policy will be given before the start of the term to minimize concern for those at various points of encountering the series). Grading will be primarily focused on short reaction papers, in-class writing and recall exercises, and a final argumentative research paper.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1675 - POLITICS OF HUMAN RIGHTS

Minimum Credits: 3
Maximum Credits: 3
Human rights have become the dominant normative discourse in global politics today. They are invoked by world leaders justifying military or 'humanitarian' interventions and by local and indigenous social movements challenging their domination within existing systems of social relations. They are lauded as essential to human dignity and decried as tools of imperialism and neo-colonialism. They are tools of the oppressor and tools for the oppressed. How can we make sense of these seemingly contradictory uses and understandings of human rights? This course seeks to explain human rights as fundamentally contested political claims. It develops this perspective through attention to the real politics of human rights, surveying existing human rights law and institutions, examining several important contemporary human rights issues, and reflecting on the different tools that political and social science offer for making sense of these controversies. The emphasis is on helping students to acquire a critical understanding of human rights that they can use to assess contemporary events; students will work together on collaborative projects on issues of their own choosing to develop and apply their learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

PS 1681 - CAPSTONE SEMINAR IN POLITICAL THEORY

Minimum Credits: 3
Maximum Credits: 3
Capstones are writing intensive courses for senior, PS majors. Subject matter will vary from term to term depending on the interests, area of expertise, and inclinations of the particular instructor.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: Political Science (BA or BS or BPH); LVL:Sr; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

PS 1691 - MYTH, PROPAGANDA, AND THE STATE - ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
This course focuses on a single notion: that states use narrative(s) to support their regimes. The class aims to prepare students for understanding how story, myth, propaganda, and indoctrination are used by various political actors to build, sustain, and/or destroy regimes. The course begins with a consideration of quintessential cases of states engaging in these practices (ancient Rome, fascist Italy, imperial Japan, and Cambodia under the Khmer Rouge). It then examines parallel examples within united states history and narratives. The second half of the course then focuses on the practice of propaganda specifically, considering its modern origins in WWI, examining transitions in technique across multiple states, weighing

linkages to advertising and public information campaigns, and finally having students construct their own propaganda. The course concludes with a formal content analysis training focused on a particular vein of propaganda, and an assignment that has students blending content analysis consideration with political theory argument construction. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1692 - DEMOCRATIC THEORY-ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Democracy is a centrally important concept in political science. Those who wish to study almost any aspect of politics ' from election campaigns to domestic policy processes to international relations ' will, at some point, be expected to articulate a theory of democracy. Even those who study authoritarian regimes often use democratic regimes as counterpoint examples. In short, a well-rounded political scientist must know something about both democratic institutions and democratic theory. This course aims to provide students with an appreciation of the varieties of democratic thought, a knowledge of the great debates in the field, and a sense of how democratic ideals have been approximated in institutional forms. This class will include a significant training in a specific analysis method or methods to complement the course topic, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1693 - POLITICAL THEORY AND THE FUTURE

Minimum Credits: 3
Maximum Credits: 3
Political Science has been effective at charting the patterns of the past and diagnosing concerns of the present, but consideration of the future is a different matter. This course deals with how to conduct "future-regarding" inquiry effectively, and seeks to train students in this analytical method of approaching a variety of topics that will be critical areas of political life and change in the future. The course covers why the future is difficult for political institutions and political thinkers to deal with and what attempts to effectively regard the future do exist. Automation, the nature of war, relations between generations, climate change, privacy, and many more topics will be covered in the process of learning to be more "future-regarding".
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1699 - ANALYSIS OF POLITICAL THEORY

Minimum Credits: 3
Maximum Credits: 3
This class focuses on significant training in a specific analysis method or methods to complement the study of Political Theory, as well as satisfy the requirement for a Political Science department analysis course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1702 - CODING AND COMPUTATION SOCIAL SCIENCE

Minimum Credits: 3
Maximum Credits: 3
From the hacking of elections and the spread of disinformation to algorithms that have been used to organize protests as well as for brutal repression, the era of "big data", "analytics", and "data science" has ushered in new computational tools and digital realities that are changing societies, economies and political relations. This class is meant to be a gentle introduction to the emerging field of computational social science, where we study the opportunities and challenges with both collecting and exploring digitally available political and social information such as text, geo-locations and social media connections to better understand human decisions and interactions. We begin by going back to basics, exploring the reasons and ways individuals and policy-makers use and misuse data. We then turn our focus to flexible computational tools for data collection and visualization and how they can provide unique help in answering important questions such as what causes war and violence, who represses human rights, and what parties are likely to win elections. By the end of the class, students will be exposed not only to coding and computer languages that are often used in data analytics in industry, government and academia, including bash, Python and R, but how these languages can be used to better understand the changing digital world that surrounds us.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1836 - POLITICS THROUGH FILM

Minimum Credits: 3
Maximum Credits: 3
This course uses cinema from a variety of countries to explore, in comparative perspective, central concepts and themes of politics, such as power, authority, conflict, leadership, ideology, propaganda, revolution, justice, and participation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PS 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 12
Credit for internships per se is normally limited to the Washington center for learning alternatives or other special centers with which the University of Pittsburgh has formal arrangements.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

PS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Independent study is normally associated with internships or special programs like the Washington center on learning alternatives.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

PS 1902 - DIRECTED READING

Minimum Credits: 1
Maximum Credits: 3
Readings on special topics for which courses are not currently offered.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PS 1903 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 6
Research on special topics for which courses are not currently offered.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PS 1905 - DIRECTED STUDY:FIELD TRIP ABROAD

Minimum Credits: 1
Maximum Credits: 6
Readings on special topics for which courses are not currently offered.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PS 1910 - INSTITUTE OF POLITICS INTERNSHIP/SEMINAR

Minimum Credits: 4
Maximum Credits: 4
Students selected for the institute of politics internship will register for this course for the experiential component of their internships. The purpose of the internship experience is to provide the student with direct exposure to the process of public decision-making. Each student will spend nine hours a week working with an individual or office directly involved in the policy making process. Students will be given specific responsibilities and will be expected to be an active and integral part of the office in which they are placed. The details and terms of each placement will be carefully worked out and agreed upon by the student, the placement supervisor and the placement sponsor. Utmost care will be taken to insure that the student is placed in a situation that will maximize his/her exposure to all office activities and that the student is not left unsupervised and uninvolved. Students from all disciplines may apply, but preference will be given to students in their junior and senior years. Students must report to their placement for at least nine hours a week and fulfill any agreed upon responsibilities. Students will also be required to keep a written journal which describes and analyzes their internship experience
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

Psychology

PSY 0005 - INTRODUCTION COGNITIVE SCIENCE

Minimum Credits: 3
Maximum Credits: 3
A survey course that utilizes a cross disciplinary approach to cognition, and an introduction to the various disciplines within a single coherent framework. The course covers basic cognitive processes of perception, language and thought, examining how each of these areas is examined within the disciplines of psychology, neuroscience, linguistics, philosophy and artificial intelligence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PSY 0010 - INTRODUCTION TO PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Summary of our present knowledge in fundamental areas of learning, sensation and perception, biological basis of behavior, developmental patterns, motivation, emotion, personality and adjustment, and measurement of behavior. Information and concepts are applied to problems in understanding human behavior. Additional out-of-class experiments or an equivalent research paper are a part of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Natural Science General Ed. Requirement, DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req., SCI Polymathic Contexts: Science NonSeq.GE. Req.

PSY 0011 - INTRODUCTION TO THE FIELD

Minimum Credits: 1
Maximum Credits: 1
This one-credit course is designed for newly declared psychology majors. Course content will provide an introduction to the psychology department, a review of experiential learning opportunities, a discussion of graduate school and career options including sub¿elds within psychology and related ¿elds, and out of the classroom exercises. Through lectures, guest speakers, in-class exercises, small group discussions and written assignments, students will engage in self-assessment, undertake academic and career planning, develop professional skills and learn to utilize available resources to advance in their careers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: Restricted to PSY majors with fewer than 85 credits.

PSY 0035 - RESEARCH METHODS

Minimum Credits: 4
Maximum Credits: 4
The course introduces students to the fundamentals of psychological research, including the nature of psychology as a science, the selection of a research problem, research designs, writing research proposals and papers using APA style and ethical considerations. PSY 0035 is only available to

students who have taken it in the past and wish to improve their grade. Anyone who has not previously taken 0035 will not be allowed to enroll and should instead enroll in PSY 0036 Research Methods Lecture and PSY 0037 Research Methods Lab (this is the same course as 0035 (Lecture and Lab); only the numbers and name have changed). If you have previously enrolled in PSY 0035 and wish to repeat it for grade improvement, you will need the permission of the Psychology Advising Office. To obtain a permission number, contact Jennifer Stapel, jstapel@pitt.edu, 3113 Sennott Square.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (STAT 0200 or 1000 or 1100 or PSY 0201 or 0270 or MATH 0133) and Permission of the Department
Course Attributes: Writing Requirement Course

PSY 0036 - RESEARCH METHODS LECTURE

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the fundamentals of psychological research. Specifically, the goals are to learn how to: a) read, interpret, and understand research; b) critique research; and c) design valid research that is robust to critiques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (STAT 0200 or 1000 or 1100 or PSY 0201 or 0270 or MATH 0133 with a grade of C or better). ANTIREQ: Enrollment blocked if currently or previously enrolled in PSY 0032, PSY 0035, or PSY 1031

PSY 0037 - RESEARCH METHODS LABORATORY

Minimum Credits: 3
Maximum Credits: 3
The course amplifies the introduction to the fundamentals of psychological research provided by PSY 0036, Research Methods Lecture. It introduces students to the fundamentals of writing scientific reports in psychology. Students will learn how to use APA style, how to display and report quantitative results, and basic guidelines for writing format, style, and expression. This course is writing intensive, and students are expected to write research reports and comment extensively on the writing of their peers during in-class and take-home exercises.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (STAT 0200 or 1000 or 1100 or PSY 0201 or 0270 or MATH 0133 with a grade of C or better and CREQ: PSY 0036 . ANTIREQ: Enrollment blocked if currently or previously enrolled in PSY 0032, PSY 0035, or PSY 1031
Course Attributes: Writing Intensive Course (WRIT)

PSY 0105 - INTRODUCTION TO SOCIAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
An overview of social psychology. The scientific study of how one person's behavior and/or characteristics can influence the thoughts, feelings and behaviors of others. Topics covered include social perception, attitude formation and change; prejudice and discrimination; altruism and aggression; cooperation, competition, and bargaining; group decision making, leadership; and environmental effects on behavior.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

PSY 0160 - PSYCHOLOGY OF PERSONALITY

Minimum Credits: 3
Maximum Credits: 3
Survey of major approaches to the study of personality, focusing on their relative abilities to provide coherent explanations for individual behavior. Issues involved in the assessment of personality will also be discussed and several assessment procedures evaluated. Recent research in personality psychology is reviewed and analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200
Course Attributes: DSAS Social Science General Ed. Requirement

PSY 0182 - LAW AND SOCIAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the social psychological aspects of the criminal justice system. Topics covered include victim reporting, police discretion, pretrial processes, interaction in the courtroom, juror selection and decision making, the sentencing decision, the prison experience, parole decision making and return to society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200

PSY 0184 - PSYCHOLOGY OF GENDER

Minimum Credits: 3
Maximum Credits: 3
This course is intended to be an introduction to the theories and current research on the psychological nature of women and the psychology of gender roles. The male perspective on gender roles will also be included. The effects of cultural factors that determine both female and male roles in our society will be examined as well as how these roles affect different interpersonal relationships between women and men. The potential for change at both the societal and individual level will be discussed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0105 or 0101 or 0200 or 0203 or 0210
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, Gender, Sexuality & Women's St, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

PSY 0186 - CROSS CULTURAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
The systematic, scientific study of human behavior takes into account the diverse ecological and cultural settings in which we live. The course covers traditional topics in human psychology-perception, cognition, personality development, intergroup relations and impact of social change. Research data are emphasized. Approach is interdisciplinary, integrating material from anthropology as well as psychology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 0205 - PSYCHOPATHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the major issues in the area of mental illness. This course emphasizes the scientific approach to understanding the major psychological and behavioral disorders. The research and clinical literatures regarding the etiology, course and treatment of these disorders will be presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200. ANTIREQ: Enrollment blocked if currently or previously enrolled in PSY 1205, PSY 0206, or PSY 1141.

PSY 0310 - DEVELOPMENTAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
The course focuses on development of the child from birth to adolescence, the current theory and research concerning social, emotional, intellectual, perceptual and language development. The organization of the course is topical. Coverage is confined to normal development; what develops, how and why in the average child. Little attention to abnormal development.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200
Course Attributes: Children's Literature

PSY 0380 - PSYCHOLOGY OF AGING

Minimum Credits: 3
Maximum Credits: 3
This course is designed to examine the basic psychological changes occurring through adulthood into old age. Particular emphasis will be given to the biological, social, and cultural influences. Discussions with some outside speakers, movies and demonstrations augment the course.
Academic Career: UGRD
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 0405 - LEARNING AND MOTIVATION

Minimum Credits: 4
Maximum Credits: 4
This course elucidates fundamental principles of learning and motivation as derived predominantly from animal research. Focus is given to the empirical and conceptual processes underlying the facilitation and suppression of behavior, e.g. primary and conditioned reinforcement, non-reinforcement, punishment and avoidance as well as the generalization and discrimination of these processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200
Course Attributes: Children's Literature, DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PSY 0407 - LEARNING AND BEHAVIOR

Minimum Credits: 3
Maximum Credits: 3
This course elucidates fundamental principles of learning and motivation as derived predominantly from animal research. Focus is given to the empirical and conceptual processes underlying the facilitation and suppression of behavior, e.g. primary and conditioned reinforcement, non-reinforcement, punishment and avoidance as well as the generalization and discrimination of these processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 0422 - COGNITIVE PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to core issues, theories, and experimental finding in cognitive psychology. Topics to be covered include sensory perception, attention, memory, imagery, language, reasoning, problem solving and decision making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0101 or 0200
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PSY 0423 - COGNITIVE PSYCHOLOGY LAB

Minimum Credits: 3
Maximum Credits: 3
This course exposes students to the details of experimental methods in cognitive psychology, with a particular focus on experimental laboratory studies. Students will also improve their understanding of research report writing, computer skills, and quantitative data analysis skills. The course is organized according to the research process, which is implemented twice across two projects. For each project, students read background literature, develop research hypotheses, design experiments to test them, conduct the experiments, analyze the results, and write-up the experiments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0035 or 1031 or PSY 0036 and 0037) and (PSY 0422 or 0410); PLAN: Psychology (BS)
Course Attributes: Writing Intensive Course (WRIT)

PSY 0505 - INTRODUCTION TO BIOPSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This is a survey course in which the biological bases of certain classes of behavior are explored. The behaviors studied are limb movement, sleep and wakefulness, feeding, sexual behavior and learning and memory. Each of these behaviors is considered from the point of view of which brain structures and which neurotransmitters are involved in the production of that behavior. Emphasis is also placed on experimental techniques used to obtain relevant data and on the type of inferences which can be made from these experiments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200. Anti-requisite NROSCI 1000
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PSY 0510 - SENSATION AND PERCEPTION

Minimum Credits: 3
Maximum Credits: 3
This course examines the nature of the mechanisms that transform sensory input into our perceptual experience of the world. Physics helps us to understand our environment, and biology helps us to understand ourselves. The investigation of sensation and perception combines physics and biology so that we can understand how environmental phenomena, as perceived by our senses, influence our understanding of the world. This course examines how the human brain receives and processes information from our environment and explores the functioning of human sensory systems and how physical stimuli are transformed into signals that can be understood by the nervous system. Topics covered in the course include vision, audition, taste, smell, touch, and basic psychophysics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200
Course Attributes: DSAS Natural Science General Ed. Requirement, SCI Polymathic Contexts: Science NonSeq.GE. Req.

PSY 0515 - REHABILITATION PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 0680 - INTRODUCTION INDUSTRIAL/ORGANIZATIONAL

Minimum Credits: 3
Maximum Credits: 3
A survey course of contemporary practice in the field of industrial psychology. Principal topics include employee selection, testing, performance appraisal, training and development, leadership, work motivation, organizational psychology, conditions at work, engineering psychology, employee safety and health, consumer and marketing psychology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1025 - TESTS AND MEASUREMENT

Minimum Credits: 3
Maximum Credits: 3
This course reviews representative examples of current psychological tests and covers, in some detail, the nature of psychological measurement and the elements of test theory and test construction. Topics covered include item analysis, item selection techniques, reliability, validity and validation procedures, standardization and norming, and the conceptual problems in test interpretation.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0015 or 0101 or 0200) and (STAT 0200 or 1000 or 1100 or PSY 0020 or 0201 or 0270)

PSY 1050 - TOPICS IN PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
A topics course. Content will vary from term to term depending on instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0200

PSY 1051 - TOPICS IN SOCIAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics in social psychology will vary from term to term, depending on instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0105 or 0203 or 0210

PSY 1052 - TOPICS IN CLINICAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics in clinical psychology will vary from term to term, depending on instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1053 - TOPICS IN DEVELOPMENTAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics in developmental psychology will vary from term to term depending on instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0015 or 0101 or 0200) and (0202 or 0230 or 0310) and (STAT 0200 or 1000 or 1100)

PSY 1054 - TOPICS IN COGNITIVE PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics in cognitive psychology will vary from term to term, depending on instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0035 or 1031 or 0036 and 0037)

PSY 1057 - TOPCS IN BIOLOGICAL AND HEALTH PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Topics in biological and health psychology will vary from term to term, depending on instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0015 or 0200) and (PSY 0032 or 0035 or 1031)

PSY 1059 - TOPICS IN ADVANCED RESEARCH METHODS

Minimum Credits: 3
Maximum Credits: 3
This course involves the practical application of theories, concepts, and scientific methods to generate testable hypotheses, identify appropriate methodology, select and operationalize appropriate variables, conduct a small scale research project, conceptualize relevant data analyses, and engage in writing assignments involving analysis, interpretation, and critical evaluation of results. Research topics are specific to and will vary from section to section.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0035 or 1031 or 0036 and 0037) and (STAT 0200 or 1000 or 1100 or PSY 0201 or 0270 or Math 0133); PROG: School of Arts & Sciences

PSY 1064 - ADVANCED DIRECTED RESEARCH

Minimum Credits: 3
Maximum Credits: 3
This three-credit course is designed to supplement the directed research experience so as to satisfy the Psychology Major requirement for an advanced lab. Enrollment is by Permission of the Department. Instead of students enrolling in a second semester of PSY 1903, students can meet the advanced lab requirement by enrolling in 1064 while continuing to work for a second semester in the same research lab with the same faculty research mentor. To enroll in PSY 1064, students must complete an Advanced Directed Research Course (ADRC) agreement (downloadable with instructions from the department's website) in conjunction with the ADRC instructor and the faculty research mentor. The grade for PSY 1064 will be based upon performance in the research lab as evaluated by the faculty research mentor and completion of course assignments carried out under the guidance of the ADRC instructor.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0035 or PSY 0036 and 0037.

PSY 1075 - HISTORY OF PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will focus on major trends in the history of American psychology and their 18th- and 19th-century social and intellectual roots. Topics include the physiological and philosophical origins of scientific psychology; the rise of dynamic psychology in Europe and the United States; Lunacy and American Asylum care; early experimental and quantitative psychology; the influence of William James and James Mark Baldwin; the structuralism/functionalism debate; animal learning and the origins of behaviorism; World War I and mental testing; neobehaviorism; the influence of gestalt psychology; and World War II and the cognitive revolution.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200; LVL: Jr or Sr
Course Attributes: West European Studies

PSY 1080 - PSYCHOLOGY AND THE MEDIA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1110 - PSYCHOLOGICAL ASPECTS OF HUMAN SEXUALITY

Minimum Credits: 3
Maximum Credits: 3
The course presents a social-psychological and psycho-biological orientation towards the study of human sexuality. Current research is emphasized. Topics such as sexual attitudes, hormones and behavior, changing sexual behavior, sex education, gender-role development, alternative forms of sexual expression, and violence and sex are covered.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [(PSY 0010 or 0012 or 0015 or 0101 or 0200) and (PSY 0105 or 0203 or 0210)] or (PSY 0160 or 0184 or 0204 or 0240)
Course Attributes: Global Studies

PSY 1112 - PSYCHOLOGICAL ASPECTS OF HUMAN SEXUALITY: RESEARCH WRITING PRACTICUM

Minimum Credits: 3
Maximum Credits: 3
This course presents a social-psychological and psychobiological orientation towards the study of human sexuality. Current research is emphasized. Topics such as sexual attitudes, hormones and behavior, changing sexual behavior, sex education, gender-role development, alternative forms of sexual expression, and violence and sex are covered
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0035 or 0032 or 1031) and (STAT 0200 or 1000 or 1100 or PSY 0020 or 0201 or 0270)
Course Attributes: DSAS Diversity General Ed. Requirement, Gender, Sexuality & Women's Studies, Writing Requirement Course

PSY 1130 - SPECIAL TOPICS ON PSYCHCHOLOGY OF GENDER

Minimum Credits: 3
Maximum Credits: 3
An advanced course which deals with psychological research relating to women and power. Topics covered include physical power, nonverbal perpetuation of power differences, power motivation, social power, power dynamics in the family and political power. Each semester the course has a different focus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Gender, Sexuality & Women's Studies

PSY 1134 - SOCIAL BONDING: FROM MOLECULES TO MIND

Minimum Credits: 3
Maximum Credits: 3
This course explores how emerging findings at the interface of psychology and affective neuroscience combine to inform our understanding of how we bond with others. Following a review of relevant brain regions, neurochemicals, and methodology, topics span current theories and research on the study of bond formation and maintenance, and the supporting neurobiology underlying different types of social bonds. Readings will come from relevant selections from the current literature. Course requirements include 2 exams, in-depth class discussion and exercises, and a formal presentation of assigned readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0105 or 0203 or 0210

PSY 1135 - SOCIAL PERCEPTION AND COGNITION

Minimum Credits: 3
Maximum Credits: 3
Historical problems and current issues are identified. Some general principles of perception and cognition are reviewed. Recent research and theoretical formulations are considered in each of these areas; impression formation, interpersonal attraction, causal and moral attribution, prediction of behavior, perceptions of interpersonal relations, group stereotyping and prejudice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200; Min Grade 'B'

PSY 1137 - CLOSE RELATIONSHIPS

Minimum Credits: 3
Maximum Credits: 3
A seminar-style course examining adult close relationships (with an emphasis on romantic relationships) from a social psychological perspective. Topics covered include interpersonal attraction, commitment and interdependence, relationship cognition, attachment and insecurity, communication,

sexuality, conflict, relationship dissolution, and relationship maintenance. Class meetings will consist mainly of facilitated discussions and student-led presentations.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200

PSY 1139 - SOCIAL NEUROSCIENCE

Minimum Credits: 3
Maximum Credits: 3
In this discussion-based seminar course, we will focus on the principles of social cognitive and affective neuroscience (SCAN) and survey a broad array of topics in the field. SCAN is a fundamental merging of social science questions and neuroscience methods, with particular emphasis on fMRI. We will discuss how neuroimaging can inform our understanding of social interaction, self-perception, and our emotions, beliefs and behaviors. This course is appropriate for both students with background in social neuroscience and those with no prior background, but who are considering doing research in this area or are interested in the neurobiology of social behavior. Students are expected to read and comment on papers, participate actively in class discussions, complete written assignments, and lead a group discussion.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200

PSY 1142 - CONFLICT RESOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course explores the psychology of conflict and its resolution, with a focus on conflict in our interpersonal relationships. Topics include the nature of conflict. barriers to conflict resolution, the benefits and costs of various responses to conflict (e.g., forgiveness, revenge, apologies), and factors that predict constructive vs. destructive responses to conflict. Classes include a lecture component but generally follow a seminar format consisting of facilitated discussions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200

PSY 1145 - SOCIAL RESEARCH ADVANCED LAB

Minimum Credits: 3
Maximum Credits: 3
This is a laboratory course that will focus on research methods in the area of social psychology. As a student in this course, you will complete in-class activities as well as individual and small group assignments designed to prepare you for conducting research in social psychology. Course requirements include oral presentations and written assignments. Students will critique empirical journal articles, complete small group assignments that explore a variety of research designs, develop an independent research proposal based on a prominent social psychological theory, and collect and analyze data to test a hypothesis that extends upon a published empirical paper relevant to social psychology.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PSY 1205 - ABNORMAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the major issues in the area of mental illness. This course emphasizes the scientific approach to understanding the major psychological and behavioral disorders. The research and clinical literatures regarding the etiology, course and treatment of these disorders will be presented. PSY 1205 is only available to students who have taken it in the past and wish to improve their grade. Anyone who has not previously taken 1205 will not be allowed to enroll and should instead enroll in PSY 0205: Psychopathology (this is the same course as 1205; only the number and name have changed). If you have previously enrolled in PSY 1205 and wish to repeat it for grade improvement, you will need the permission of the Psychology Advising Office. To obtain a permission number, contact Jennifer Stapel, jstapel@pitt.edu, 3113 Sennott Square.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010, PSY 0101 or PSY 0200 and Permission of the Department

PSY 1210 - INTRODUCTION TO CLINICAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is directed toward the student seriously interested in the major issues pertaining to clinical psychology. The course provides an overview of the major therapeutic approaches and incorporates other germane issues such as history of the field, assessment issues, interviewing approaches, community psychology, behavioral medicine, and clinical research and methodology. Present therapeutic approaches are placed in the context of an evolving discipline, anchored in an empirical-scientific approach to the subject matter.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0205 or 1205 or 0206 or 1141)

PSY 1213 - PSYCHOPATHOLOGY ADVANCED LAB

Minimum Credits: 3
Maximum Credits: 3
This course will involve developing your own hypothesis regarding data previously collected from individuals with a mood disorder, followed by analysis of the data to test the hypothesis with support from the professor. The ¿nal paper will summarize the relevant scienti¿c literature, theoretical rationale, the methods and analyses, results, and a discussion of the work similar to published articles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0205 or 1205 or 0206 or 1141

PSY 1215 - HEALTH PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to the major questions and methods which have guided the research in health psychology. This field examines the role of psychological and social factors in the development and progression of medical disease. Three main topics are covered: (1) conceptual underpinnings of health psychology, (2) psychosocial factors and specific diseases, and (3) evaluating behavioral medicine interventions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0035 or 1031 or 0036 and 0037) and (PSY 0105 or 0505 or 1500 or 0203 or 0210)

PSY 1217 - FUNCTIONAL MRI

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1225 - PSYCHOLOGY OF EMOTION

Minimum Credits: 3
Maximum Credits: 3
The science of emotion is critical to our understanding of human behavior. Applications and related fields include neuroscience, marketing, affective computing, psychopathology, and human-robot communication. This course will introduce you to major approaches to emotion and address topics that may include perception, communication, individual differences, development, affective computing, and dynamics of facial and vocal expression. Depending upon student interests, some topics and readings may be more or less emphasized and others introduced. Readings will include a textbook and empirical articles and chapters. You will learn about measurement approaches and develop and present a major project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0035 or 1031 or 0036 and 0037) and (PSY 0105 or 0160 or 0202 or 0203 or 0204 or 0210 or 0230 or 0240 or 0310)

PSY 1226 - ANXIETY THEORY & TREATMENT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1227 - BEHAVIOR GENETICS

Minimum Credits: 3
Maximum Credits: 3
The goals of this course are to introduce and discuss behavior genetic approaches to psychology, which involve the study of the genetic and environmental causes of psychological differences among individuals. The following topics will be covered: overview of genetic principles and introduction to quantitative and molecular behavior genetic concepts and methods, as illustrated through studies of several important clinical psychopathologies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0035 or 1031 or 0036 and 0037) or Permission of the Department

PSY 1230 - PSYCHOLOGY OF DEATH AND DYING

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to widen the student's understanding of human death in its biological, socio-cultural, and primarily psychological dimensions. We will examine the concept of death, psychological reactions to death and dying, historical and demographic aspects, selected issues such as end-of-life care, medical ethics, suicide, legal concerns, children's concepts of death, and the process of bereavement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0101 or 200) and (PSY 0205 or 1205 or 0206 or 1141)

PSY 1235 - ALCOHOL USE AND ABUSE

Minimum Credits: 3
Maximum Credits: 3
This course covers a range of topics related to alcohol, including history, anthropology, sociology, epidemiology and literature. Topics include psychopharmacology, social-cognitive effects of drinking, etiology of alcoholism, as well as the prevention and treatment of alcoholism. This course also addresses abuse of other selected drugs such as nicotine, cocaine and heroin.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and(PSY 0035 or 1031 or 0036 and 0037) and (PSY 0205 or 0206 or 1141 or 1205) and (PSY 0105 or 0203 or 0210 or 0410 or 0422)

PSY 1237 - NICOTINE, TOBACCO, AND HEALTH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1255 - PRINCIPLES OF BEHAVIOR MODIFICATION

Minimum Credits: 3
Maximum Credits: 3
Behavior modification techniques are the most commonly used interventions in psychology, education and health psychology. In this course, students will learn basic concepts, theories and research in behavior modification in the context of clinical applications. Most learning will occur through practical, applied exercises. In one set of exercises, students will choose a hypothetical client and apply behavioral methods to their client's case. Students will develop a portfolio of assessment and treatment techniques for their client.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1270 - CHILD PSYCHOPATHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course considers research and theory which bear on the development of psychological disorders in children. Biological and environmental factors which contribute to childhood disorders are considered with special emphasis on the role of the family. Childhood psychosis, hyperactivity, and depression are studied to illustrate theoretical models and empirical findings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 OR 0101 or 0200) and (PSY 0310 or 0202 or 0230) and (PSY 1205 or 0205 or 0206 or 1141)

PSY 1305 - EXPERIMENTAL CHILD PSYCHOLOGY

Minimum Credits: 4
Maximum Credits: 4
This course introduces students to the scientific basis of theories and issues in developmental psychology. In lectures, discussion and structured experiments students learn about and apply basic methods of research in child development, including conceptualization, design, data collection, analysis and write-up. This course exposes students to development over infancy and childhood. The actual topics under study may vary by semester and include gender role development, cognitive development, and language development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 OR 0101 or 0200) and (PSY 0035 or 1031 or 0036 and 0037) and (PSY 0310 or 0202 or 0230)
Course Attributes: Writing Intensive Course (WRIT)

PSY 1312 - CHILD DEVELOPMENT & SOCIAL POLCY

Minimum Credits: 3
Maximum Credits: 3
In this course we will examine how a range of public policies shape the well-being of children and families. Poverty and inequality will be a central focus of the course. Policies addressed in the course include means-tested government programs, tax policy, early care and education policy, home visitation programs, housing policy, child abuse and neglect policies, k-12 education policy, and immigration policy. The goal of this course is to teach students to think critically about the implications of local, state, and federal policies for children and families.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0202 or 0230 or 0310

PSY 1315 - DEVELOPMENTAL PSYCH: INFANCY

Minimum Credits: 3
Maximum Credits: 3
This course will explore how infants develop from conception to approximately age three. Topics that will be covered include motor development, social development, emotional development, perceptual development, and cognitive development. The course will also explore how knowledge about infant development is applicable across disciplines and careers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0310 or 0202 or 0230)

PSY 1320 - LANGUAGE DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
What does mastering a language look like and how do human children do it so quickly while animals do not? What happens if children are deprived of language? Is language special, or is it part of our general cognitive ability? We will examine all these questions and, in the process, learn about typical language development and the methods used to study it.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0310 or 0202 or 0230
Course Attributes: Childrens Literature

PSY 1321 - AUTISM SPECTRUM DISORDER

Minimum Credits: 3
Maximum Credits: 3
This course will be devoted to a discussion of psychological theory and research in ASD. Topics to be covered include the early history of the study, diagnosis, and treatment of autism; current classification and diagnostic issues and techniques; epidemiological and etiological issues; major neurological and psychological theories of ASD; research on sensory atypicalities and stereotyped and repetitive motor behaviors, early identification, early social and communicative skills, affective, attentional, symbolic, and social factors; and intervention issues in ASD.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200

PSY 1323 - RISK, RESILIENCE, AND EARLY STRESS

Minimum Credits: 3
Maximum Credits: 3
Sadly, millions of children in the United States and throughout the world are exposed to chronic and uncontrollable adversities (e.g., extreme poverty; maltreatment). These adverse childhood experiences are related to compromised physical and mental functioning throughout development. However, individuals and communities exposed to these types of intense challenges often exhibit an amazing level of resiliency. Across the course, we will anchor ourselves in bio-psycho-social models of development, review these different sets of findings, and think about developmental interactions between the individual, family, community, and culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1325 - DEVELOPMENTAL PSYCHOLOGY: SOCIAL DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
An introductory survey of methods, theories, and research on the personality and social development of humans from infancy through early adolescence in the United States. This course examines individual development from a biological, contextual, and cultural point of view: how people come to be who they are, and how change and continuity work together over time. First comes an investigation of starting points in development. We will study the infant's ï¬rst social relationships and try to understand the connection between early temperament and mature personality. Basic concepts of developmental theory will also be introduced. Next we examine how children function within increasingly complex and varied social environments such as families, peer groups, and educational settings. Topics covered include self-development, sex diï¬erences and gender role development, achievement motivation, prosocial behavior/altruism, moral development, and social behavior. This upper level course is designed for psychology majors. The course may be of interest to other advanced undergraduate students who are interested in psychology, child and adolescent development, education, and related disciplines.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0310 or 0202 or 0230) and (PSY 0035 or 1031 or 0036 and 0037)

PSY 1330 - DEVELOPMENTAL PSYCHOLOGY: COGNITIVE DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course covers major areas of cognitive and intellectual development spanning infancy, childhood, adolescence and old age. Topics covered include perception, language, memory, attention, and higher order cognition
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1355 - ADOLESCENCE

Minimum Credits: 3
Maximum Credits: 3
Adolescence is one of the most rapidly changing periods of the lifespan. This course will cover the fundamentals of psychological development during adolescence by exploring how the psychological, biological, and social changes that occur across this timeframe impact the development of the self, identity, and relationships. We will explore how these changes are tied to psychopathology, risk behaviors, and positive development during adolescence, and how development during the adolescent period sets the stage for functioning in adulthood. A major emphasis of this course will be on the role of interpersonal and sociocultural contexts of adolescent development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0310 or 0202 or 0230)
Course Attributes: Children's Literature

PSY 1357 - PSYCHOLOGY OF AGING

Minimum Credits: 3
Maximum Credits: 3
This course is designed to examine the psychological changes that occur through adulthood and into late life from a life-span developmental perspective. Biological, cognitive, emotional, and social aspects of the aging process will be explored in depth. Historical and contemporary perspectives on aging as well as cultural influences on the experience of aging will be examined. Psychological aspects of aging will be explored from individual, familial, and societal viewpoints. Lecture, class discussion, small group work and media presentations will be utilized.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200

PSY 1360 - PSYCHOLOGY OF BLACK CHILDREN

Minimum Credits: 3
Maximum Credits: 3
This course surveys and critically evaluates literature on the development of black children from birth to adolescence. Topics to be covered include prenatal influences on growth and development; structure and socialization practices of black families; black English and language development; cognitive development; psychological testing of black children; self-concept and racial identification.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0035 or 0032 or 1031) and (PSY 0310 or 0202 or 0230) and (STAT 0200 or STAT 1000 or STAT 1100 or PSY 0020 or 0201 or 0270)
Course Attributes: Childrens Literature

PSY 1361 - DIVERSITY IN CLINICAL PRACTICE

Minimum Credits: 3
Maximum Credits: 3
This course is intended to enhance students' knowledge base, awareness, and appreciation for diverse groups in the U.S. Course content will cover foundational cognitive and social psychology research relevant to diversity concepts, identity development and experiences of members of numerous diverse groups, clinical research relevant to work with diverse clients, and review of education, training, and practice guidelines for psychologists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200

PSY 1435 - BEHAVIOR CONTROL IN SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the scientific principles used in behavior management and examines some of the uses of behavior management in various work settings, other institutional settings, in governmental control and in open society. The relation of the uses of behavior control procedures to ethics, social planning, and individual freedom are explored. Behavior analysis serves as the basis for examining traditional management of people as it is found in a variety of social situations without the intervention of experts in behavior management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1470 - COGNITION AND THE BRAIN

Minimum Credits: 3
Maximum Credits: 3
Cognitive psychologists have been exploring the human mind through behavioral studies for over fifty years. In parallel, neuroscientists have built-up an understanding of the human brain. The study of cognition in the brain, known as cognitive neuroscience, lies at the intersection of these fields, asking some of the toughest but most fascinating questions in science: How are memories stored in the brain? Is our brain pre-prepared to learn language? How does the average human brain outperform many face recognition algorithms? What is the role of sleep in cognition? We will explore these and many other questions in this course. As well as being interesting in its own right, cognitive neuroscience is having an increasing impact on our lives, such as through the developing field of 'brain reading' with brain scanners, or new devices that can change the brain's activity at the push of a button. Through learning about the techniques used by cognitive neuroscientists and reading studies first-hand, students will come away with a better understanding of this cutting-edge field and of their own brain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200 or NROSCI 1000 or 1003

PSY 1471 - MAPPING HUMAN BRAIN CONNECTIVITY TECHNOLOGY BASIC RESEARCH AND CLINICAL APPLICATIONS

Minimum Credits: 3
Maximum Credits: 3
This course covers use of a novel Pittsburgh developed High Definition Fiber Tracking (HDFT) technology providing human brain connectivity with unprecedented fidelity. The technology maps a million streamlines (0.1mm diameters sets of axons) per person providing 93 miles of tracts within the head involving 40 tracts connecting 170 brain areas. We can follow tracts from source to destination mapping projection fields with high accuracy. The fibers can be visualized and quantified providing circuit diagrams of cortical networks. These techniques will advance the study of brain systems, disorders, development, neuropathology, and neurosurgery. Students will perform projects individually or in groups analyzing collected data or developing new analysis or biomedical methods. Students can do projects that are cognitive neuroscience studies of a brain system or technical development of new methods. Sample projects might include mapping a sensory system, developmental assessment or automated brain segmentation and circuit tracing and detection of clinical anomalies (e.g., TBI breaks, tumors). Technical projects might involve better fiber reconstruction, tracking, tract segmentation or developing new visualization or statistical projects. Students must have some statistics and research experience/course work and consent of the instructor.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

PSY 1514 - EVOLUTIONARY PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
The relevance of Darwinian Theory to the study of anatomy and physiology has been obvious for many decades. Only recently however, have evolutionists begun to focus their explanatory tools on cognition, motivation, emotion, perception, and "mind". This course will examine the rationale, contributions, failures and future of evolutionary approaches to psychological phenomena. Initial lectures on the status of Evolutionary Theory will prepare the students for the discussion and evaluation of evolutionary psychology that will follow.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200

PSY 1580 - LANGUAGE AND THE MIND

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the study of language as a cognitive science, focusing on the mental processes and representations that we use to comprehend and produce language. Throughout the course we will emphasize fundamental debates in cognitive science and the ways these debates inï¬uence current psycholinguistic research into questions about sentence comprehension, production, and conversation. Because this course is multidisciplinary in nature, drawing primarily from the ï¬elds of linguistics and psychology, students will be introduced to ideas, theories, and methods used by researchers in both ï¬elds.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: PSY 0010 or 0012 or 0101 or 0200 or LING 1000

PSY 1581 - BILINGUALISM

Minimum Credits: 3
Maximum Credits: 3
In this class, we will discuss models of bilingualism, and the psycholinguistic aspects of being bilingual. Topics that may be covered include: bilingual memory representation as a function of language proficiency, language learning method, and word/concept type; how bilinguals recognize words (printed and spoken); whether the bilingual's two languages are always "active" to some extent; how bilinguals manage to use one language without getting "mixed up"; and, how speaking two languages influences thought. Discussion will be emphasized during meeting periods, and a final paper will be required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PSY 1635 - ORGANIZATIONAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course will provide broad exposure to the field of organizational psychology. We will cover concepts of leadership, motivation, group dynamics, personality, organizational development strategies, and other behavioral aspects involved in the effective management of an organization through readings, lecture, video, discussion, and case analyses. The emphasis is on building a sound grasp of leadership practice, and on developing the ability to apply such knowledge to actual business problems. The class format will include multiple hands-on assignments to assist the student in understanding how psychological theories can be applied in a work context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (PSY 0010 or 0012 or 0101 or 0200) and (PSY 0035 or 1031 or 0036 and 0037) and (STAT 0200 or 1000 or 1100 or PSY 0201 or 0270)

PSY 1900 - SUPERVISED FIELD PLACEMENT

Minimum Credits: 1
Maximum Credits: 3
Psychology majors may receive up to 3 credits for field experience in supervised agencies in the community. The experiences vary from term to term.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit
Course Requirements: PROG: Psychology (BS); LEVEL: Junior or Senior
Course Attributes: Capstone Course

PSY 1902 - DIRECTED INDIVIDUAL READING

Minimum Credits: 1
Maximum Credits: 3
Under special circumstances, psychology majors can design an individual reading course with a member of the department and in consultation with the graduate advisor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

PSY 1903 - DIRECTED INDIVIDUAL RESEARCH S/NC

Minimum Credits: 1
Maximum Credits: 3
This course involves student participation in individual experimental research supervised by a member of the faculty. This course is particularly valuable for students interested in graduate study in psychology.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

PSY 1907 - DIRECTED INDIVIDUAL RESEARCH LG

Minimum Credits: 1
Maximum Credits: 3
This course involves student participation in individual experimental research supervised by a member of the Psychology Dpartment faculty. This course is particularly valuable for students interested in graduate study in psychology.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PSY 1950 - PSYCHOLOGY SENIOR SEMINAR

Minimum Credits: 1
Maximum Credits: 1
This one-credit course is designed for psychology majors in their final year of study (either final or next-to-final term). Course content will include exploration of the field of psychology, self-assessment of learning experiences, identification of marketable skills for career and graduate school paths, and planning for transition to post-college life.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Psychology (BS or BPH); LVL: Sr

PSY 1970 - UNDERGRADUATE TEACHING ASSISTANT EXPERIENCE

Minimum Credits: 1
Maximum Credits: 3
This course involves student participation as an undergraduate teaching assistant (UTA) for a psychology course under the supervision of a faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

PSY 1973 - HONORS DIRECTED RESEARCH

Minimum Credits: 3
Maximum Credits: 3
This is the first term of research in preparation for the honors major in psychology. Development of the research problem and approval of the theses prospectus.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

PSY 1975 - HONORS THESIS/MAJORS

Minimum Credits: 3
Maximum Credits: 3
Undergraduate honors majors in psychology will register for this course when their thesis proposal has been approved and they are ready to conduct and write up the research.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course, Writing Requirement Course

Psychology in Education

PSYED 0005 - LIFE SPAN DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course follows the developing person from conception until the end of life. The course combines theory, research and practical applications from developmental psychology. Lecture topics include genetic influences on development; prenatal and birth factors; physical, cognitive, social, personality, and cultural variables which influence development in infancy, childhood, adolescence, early-, middle-, and late adulthood.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: UPB Behavioral Sciences General Ed. Requirement

PSYED 1001 - INTRO EDUCATIONAL PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
A survey of current problems in education which psychological theory and research can address. Topics include developmental approaches to teaching, educational applications of learning theory, classroom management, and testing strategies for teachers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PSYED 1002 - DEVELOPMENT: CONCEPTION THROUGH EARLY CHILDHOOD

Minimum Credits: 3
Maximum Credits: 3
This course follows the developing child from the moment of conception until early adolescence. The course content includes the biological foundations of development, physical and motor changes, language, cognition, sex role development, personality, family and peer relationships, school influences, and examples of deviant development. Theory and application are integrated.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Applied Developmental Psych (BS)

PSYED 1003 - DEVELOPMENT: MIDDLE CHILDHOOD THROUGH ADOLESCENCE

Minimum Credits: 3
Maximum Credits: 3
Adolescence is studied from a developmental perspective. Discussion begins with the history and cultural varieties of adolescence and proceeds to cover psychological accompaniments to puberty. Lectures and readings deal with cognitive growth, identity formation, moral development, family and peer relationships, psychological disturbance and education through the adolescent years.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PSYED 1002

PSYED 1004 - ATTENTIONAL TEACHING PRACTICES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PSYED 1005 - TEACHING GLOBALLY AND LOCALLY IN A DIVERSE WORLD

Minimum Credits: 3
Maximum Credits: 3
Students will be able to apply this knowledge specifically to their teaching practice as they begin their field experiences. We will critically engage in understanding the complex factors that impact education in the United States today, with an emphasis on Urban Education. A review of past teaching policies and practices will support a better understanding of the American schooling system in the 21st Century. In the Teaching Globally and Locally in a Diverse World class pre-service teachers will: (a) discuss strategies for teaching all children in a responsive, equitable manner , (b) learn to analyze the effects that marginalization has on children, (c) investigate the impact that race, culture, and socioeconomic status have on a child's education, and (d) review school reform and policy practices that have created various types of schools available to students in the United States.

Knowing that the landscape of education is changing in the United States we will discuss the globalization of schooling in our society, along with the need for a higher technological understanding to prepare children for success in today's world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PSYED 1007 - METHODS OF EVIDENCE-BASED PRACTICE

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of both quantitative and qualitative research methods. Particular attention is paid to methods of observation, interviewing, and summarizing qualitative data. Students use qualitative or mixed methods to produce a final research project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: CREQ: PSYED 1002

PSYED 1012 - DEVELOPMENTAL DISABILITIES

Minimum Credits: 3
Maximum Credits: 3
A study of developmental disabilities and their impact on child/family development. Includes discussion of philosophy of service, legislation, and service systems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PSYED 1002

PSYED 1013 - DEVELOPMENTAL PSYCHOPATHOLOGY

Minimum Credits: 3
Maximum Credits: 3
Examines the traditional medical-model view of psychopath ology in children and youth, presents alternative ways of looking at this behavior, and gives an introduction to the interpersonal skills needed for therapeutic intervention.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: PSYED 1003

PSYED 1016 - DEVELOPMENT CURRICULUM AND ACTIVITIES

Minimum Credits: 3
Maximum Credits: 3
Study of the theoretical rationale for activity and environmental programming; its relationship to the development of children and youth; and practical applications in media selection, use, and environmental design for various populations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PLAN: Applied Developmental Psychology(BS)

PSYED 1021 - THEORY, MEANING AND PRACTICE OF PLAY AND ACTIVITY

Minimum Credits: 3
Maximum Credits: 3
This course provides a comprehensive overview of the role of play and activity in human development, with a particular focus on ways of utilizing play and activity to promote positive growth in social, emotional, physical, and cognitive domains; and on interpreting the meaning of individual and group play and activity. Play and activity in the lives of persons of all ages will be considered with some emphasis on the early and school years. While academic learning is essential in this course, the focus will be on hands-on, real play as the ideal way to learn about it, and encouragement of a life-long playful spirit.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PSYED 1024 - FAMILY DYNAMICS

Minimum Credits: 3
Maximum Credits: 3
Study of different family types in the American culture and an in-depth analysis of how each family structure contributes to the development (both functionally and dysfunction ally) of all family members, especially the children and youth of the family.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PSYED 1013

PSYED 1025 - CONTEMPORARY ISSUES IN COMMUNITY

Minimum Credits: 3
Maximum Credits: 3
An introduction to the scope, organization and current issues in the child development and child and youth care field as related to the profession and to the variety of services to children and families. Field experiences include site visits to agencies providing a variety of services.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: Applied Developmental Psychology(BS)

PSYED 1028 - DEVELOPMENTAL PRACTICE SEMINAR 1

Minimum Credits: 3
Maximum Credits: 3
A seminar for the integration of theory, research, practice skills, and experience related to developmentally focused child and youth care practice. The seminar is particularly focused on the internship experience and the related know ledge base.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Applied Developmental Psychology(BS); LVL: Sr

PSYED 1029 - DEVELOPMENTAL PRACTICE SEMINAR 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of Developmental Practice Seminar 1 for the integration of theory, research, practice skills and experience related to developmentally focused child and youth care practice. The seminar is particularly focused on the internship experience and the related knowledge base.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Applied Developmental Psych (BS)

PSYED 1032 - PSYCHOSOCIAL ASPECTS OF ILLNESS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to enable students to understand the nature of and dynamics of pediatric illness, appreciate the impact an acute or prolonged health care experience may have upon children throughout the developmental process, better understand a family health care philosophy and gain an understanding of the multi-faceted role child life specialists play in today's health care environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

PSYED 1036 - DEVELOPMNTL MEANING CULTL DISTN

Minimum Credits: 3
Maximum Credits: 3
An exploration of major dimensions and issues of cultural diversity with a particular emphasis on their impact on the developing child and their implications for programs for children and youth.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Applied Developmental Psych (BS)
Course Attributes: Global Studies

PSYED 1042 - CHILD & YOUTH WORK PRACTICE 1

Minimum Credits: 1
Maximum Credits: 6
A university approved, agency based, supervised internship in developmental/interventive practice. This internship may focus on work with and/or for children, youth and families. Fifty hours of placement are required for each credit of registration.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Applied Developmental Psych (BS)

PSYED 1043 - CHILD/YOUTH PRACTICE 2

Minimum Credits: 6
Maximum Credits: 6
This course is a university approved, agency based, supervised internship in applied developmental practice which may or may not involve intervention practices. The internship may focus on work with and /or for children, youth and /or families. Fifty hours of on-site placement are required for each credit of registration.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: PLAN: Applied Developmental Psych (BS)

PSYED 1050 - SUPRVSN ADM CHLD YOUTH WRK SETNG

Minimum Credits: 3
Maximum Credits: 3
This course focuses on issues and skill development in areas related to management and supervision in child and youth care programs. A modular format will cover the function of supervision and administration in child care; communication skills; supervisory functions and skills; program development and management; and current issues in child and youth care administration.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Applied Developmental Psych (BS)

PSYED 1080 - PSYCHOLOGY AND THE MEDIA

Minimum Credits: 3
Maximum Credits: 3
Psychology and the media focuses on impact of electronic media (radio, television and internet) upon society, especially children. Course introduces students to various psychological theories (e.g., Social cognitive theory, information processing, uses and gratifications theory) to explain how we respond to and learn from the media. Topics receiving special attention include media violence, advertising, health-related behaviors, news, media effects upon academic behavior, and cultural issues. A visit to a local radio or television station will be arranged.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PSYED 1089 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PSYED 1098 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 6
Student pursues research under the direction of a faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

PSYED 1099 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 6
Provides advanced students an opportunity to explore in depth an area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

PSYED 1198 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 3
Student pursues study of various topics under the direction of faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

PSYED 1199 - DIRECT STUDY

Minimum Credits: 1
Maximum Credits: 9
Directed Study working with a faculty member with Study Abroad
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

PSYED 1233 - COMMUNITY-BASED ACTION RESEARCH 1

Minimum Credits: 2
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

PSYED 1234 - COMMUNITY-BASED ACTION RESEARCH 2

Minimum Credits: 2
Maximum Credits: 2
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

PSYED 1542 - EVIDENCE-BASED INTERVENTIONS IN REAL WORLD CONTEXTS I

Minimum Credits: 3
Maximum Credits: 3
Evidence-based interventions (EBIS) are the foundation of effective and high-quality prevention and intervention programs in education, human services, and healthcare. Both pre-service and continuing education of interdisciplinary professionals must emphasize the acquisition of knowledge and applied competencies about diverse ebis in this continuously evolving area. Many forms of prevention and intervention are used in education,

human services, and healthcare, but few such practices have 'practice-based evidence' conducted in real-world settings which validate their continued use. Thus, in this course, students will gain knowledge and skills in evidence-based contextual and individual interventions, their content, methodology, implementation, and evaluation. The course will help students who are interventionists but is not primarily clinical in orientation. Rather, it is designed to prepare future leaders ' practitioners, researchers, program administrators/directors, program evaluators, and policy specialists - in best practices and their implications
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

PSYED 1622 - CHILD LIFE PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Credits for approved hospital-based child life practicum experience.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis

PSYED 1722 - CHILD LIFE INTERNSHIP

Minimum Credits: 1
Maximum Credits: 1
Credits for approved hospital-based child life internship placement.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: H/S/U Basis
Course Attributes: Undergraduate Internship

Public & International Affairs

PIA 2115 - ENVIRONMENTAL ECONOMICS

Minimum Credits: 3
Maximum Credits: 3
This course will combine multi-disciplinary environmental topics in an introductory level course. The concept of environmental policy and its impact on environmental management will be introduced. It will focus on the various scientific, technical and social disciplines including the basic sciences as well as law, engineering, public health and economics. Attention will also be given to the effects of developing and changing environmental policy on selected industries as well as natural resources.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

PIA 2140 - FINANCIAL PRACTICES FOR ECONOMICS AND ENVIRONMENTAL SUSTAINABILITY

Minimum Credits: 3
Maximum Credits: 3
This course examines the financial practices and processes required to promote economic and environmental sustainability (both public and private comparisons). Emphasis is put on how the economic component husbands the wise use of resources to effectively achieve specific organizational successes, promoting societal or external long-term prosperity, enhancing the opportunity for living things in the environment. On the environmental and social sides stress is put on respecting things and people both in particular organizational and external community. Next focus is put on financial indicators (both early warning and long term) that have been developed and applied to predict potential financial problems before they arise. Attention is focused on financial indicators (the financial monitoring trend system-ftms) that have been developed to promote stable and sustainable financial management.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

PIA 2164 - NATURAL RESOURCES GOVERNANCE AND MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course considers how institutions influence resource and environmental outcomes. In particular, this course will focus on how the design of property rights influences prospects for effective management of resources such as energy, water, and biodiversity. Although the problem of resource management is complex, we will study how the structure of property rights, the rules governing ownership in society, provides a framework to understand when societies succeed and fail in their effort to manage resources effectively. In a general sense, the course will show why property rights, and the political institutions within which property rights are specified and enforced, are the key to understanding the extent to which societies are able to manage natural resources effectively.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

PIA 2231 - CONTEMPORARY US ENERGY POLICY

Minimum Credits: 3
Maximum Credits: 3
This class examines the energy policy choices facing U.S. policymakers. The choices involve myriad issues, including: allowing fuel exports, regulating greenhouse gas emissions, subsidizing renewable fuels and energy efficiency investments, allowing drilling on public lands, and allocating funds for research across energy sources and technologies. Broader issues include: understanding and evaluating the justifications used to support energy policies; making policy when costs and benefits are uncertain, occur in long term, and are hard to quantify; what's the 'right' price of energy; market and government failures ' what are they and how do we address them?
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade

PIA 2388 - INTERNATIONAL LAW AND POLICY

Minimum Credits: 3
Maximum Credits: 3
This course begins with an exploration of the history and sources of international law. We then survey the legal process and the application of international law to explore laws governing relations among states, and its expansion to non-state actors (e.g., the private individual, international organizations, NGOS, and multinational corporations).Students will learn about how and why international law is created and develop an understanding of the mechanisms and institutions of its enforcement. The enforcement of international law, its successes and difficulties, will require students to learn about, inter alia, the nature of international disputes, the subjects of international law, and the forums in which disputes are settled. Throughout the course, we will consider the emerging challenges faced in an international law paradigm including, organized violence, global markets, cultural coherency and conflict, identity and citizenship, technological evolution, and environmental regulation.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

PIA 2502 - GLOBAL ENVIRONMENTAL POLICY

Minimum Credits: 3
Maximum Credits: 3
The 1992 Rio Declaration on environment and development states that 'to achieve sustainable development, environmental protection shall constitute an integral part of the development process.' We discuss the linkages between development and the environment, and the role of women, indigenous peoples, and the poor in achieving equitable development and environmental protection. Using tools from economics and policy analysis, we explore the conceptualization of environmental problems (market or government failure); various policy instruments to rectify environmental problems (regulations, voluntary programs, taxes, tradable permits, payments for environmental services and international treaties such as the Basel Convention, the Montreal Protocol, and the Kyoto Protocol), and the link between trade and the environment. Students' case presentations illustrate the challenges of environmental management in developing countries and the roles of civil society, NGOs, corporations, and international institutions such as the world bank, world trade organization, and united nations environmental program. Over the course of the semester, students are responsible for several policy memos and PowerPoint presentations.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

PIA 2510 - ECONOMICS OF DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
We use basic conceptual frameworks from economics and quantitative methods to examine economic development issues. We begin by discussing Amarthya Sen's concept of 'development as freedom' and measures of development such as the Human Development Index. We examine when the market and government can serve as appropriate mechanisms to allocate resources within the economy. We discuss the institutions that are needed to ensure that markets function well. We study innovations, such as disclosure programs, that reduce corruption. We examine gender-sensitive pro-poor strategies, such as micro-credit programs, the granting of property rights to women, investment into girls' schooling and women's reproductive health. We study World Trade Organization provisions that assist or impede poor countries' access to drugs in combating AIDS and other public health crises. We review the rules of the WTO that attempt to balance free trade and countries' ability to protect public health and the environment. We discuss the role of international trade (e.g., OECD subsidies for agriculture), foreign aid and debt in encouraging or impeding economic development. Students will be graded on policy memos that are well written, based on quantitative and qualitative evidence, and oral briefings that recommend solutions to development challenges faced by governments, international organizations, non-governmental organizations or corporations.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PIA 2024 and 2025 or PIA 2026 or 2027; Graduate School of Public and International Affairs

PIA 2520 - FOOD SECURITY: AGRICULTURE & RURAL DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
Focusing on food, hunger, agriculture and rural livelihoods in low- and middle-income countries, this course is a survey of nutrition, agriculture, and food policy issues. It is a course for non-specialists in agriculture who need to be able to work with agronomists and other specialists, in rural and community development.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

PIA 2522 - GLOBAL ENERGY

Minimum Credits: 3
Maximum Credits: 3
The global energy policy course applies tools from economics, science, and policy analysis to address energy issues. We examine various energy sources in the us/eu/developing countries including oil, gas, nuclear, hydro, biofuels, solar and wind. We discuss how market failures and government policies influence the gaps between private and social costs of energy. We examine incentive policies for the adoption of renewable energy and overall benefits from restructuring towards a greener economy. We examine the role of international trade, investment, technology transfer and climate policy in increasing energy efficiency and renewable energy worldwide.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

PIA 2715 - GIS FOR PUBLIC POLICY

Minimum Credits: 3
Maximum Credits: 3
A geographic information system (GIS) is a powerful tool for the public sector and used in a variety of disciplines. GIS builds on existing methods while offering new dimensions. This course provides students with a solid foundation of the principles and applications of GIS, an introduction to the desktop software ArcGIS, and demonstrates its uses in the public sectors. Students utilize ArcGIS to analyze and display spatial and demographic data. The construction of policy is then predicated on analysis. Skills learned in core courses can be brought to this course and built upon. Students have the flexibility to focus on their particular area of interest within the public sector through project work. The course is taught via lecture and hands-on experience using the ArcGIS software.
Academic Career: GRAD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Graduate School of Public and International Affairs students only.

Public Health

PUBHLT 1001 - INTRODUCTION TO GLOBAL HEALTH

Minimum Credits: 3
Maximum Credits: 3
This introductory course covers fundamental concepts in global public health, including determinants of health, key health indicators, global burden of disease, and the relationships among health status, education, and poverty, cross-cutting issues such as culture, ethical and human rights aspects of health, and key actors in global health will also be explored. A variety of teaching modalities will be employed throughout the course including lectures, guest speakers, case studies, class discussion, audio-visual presentations, and student presentations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: Soph or Jr or Sr

PUBHLT 1002 - SPECIAL TOPICS IN GLOBAL HEALTH

Minimum Credits: 3
Maximum Credits: 3
This course provides an in-depth look at selected global health issues at a population level. This includes exploration of the determinants of health associated with these issues, prevention and control strategies, and the interplay of behavioral, social, cultural, economic, and political factors that must be considered when addressing the issues. Topics are preselected by the instructor and may vary each term. Examples are accidents and injuries; chronic diseases such as cancer, diabetes, and mental illness; neglected tropical diseases; and reproductive health. In addition, students will be exposed to an array of issues through weekly discussion of current events in global health. A variety of teaching modalities will be employed throughout the course including lectures, guest speakers, case studies, class discussion, audio-visual presentations, and student presentations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: Soph or Jr or Sr

PUBHLT 1003 - INTRODUCTION TO PUBLIC AND GLOBAL HEALTH

Minimum Credits: 4
Maximum Credits: 4
This course is an introduction to public and global health in which students will learn and apply problem solving methodologies to analyze current public health issues from local, national, and global perspectives. Through detailed case studies of communities in the US and across the world, students will gain an in-depth understanding of how biological, behavioral, environmental, and public policy components come together to determine the health of populations. Also, working individually and in groups, students will recommend interventions and evaluation methods to address specific problems. This course has no formal prerequisites. It is intended only for students in the Pitt summer edge in public health and global health program.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BCHS 2509 or EPIDEM 2110 or PUBHLT 2015; LEVEL: SOPHOMORES, JUNIORS, SENIORS

PUBHLT 1004 - PUBLIC HEALTH EXPLORATIONS

Minimum Credits: 1
Maximum Credits: 1
In this course, students will explore the varied and multidisciplinary aspects of public health by meeting once per week for (1) discussions with a variety of public health researchers, leaders, and field workers, or (2) field trips to local public health institutions. This course has no formal prerequisites. It is intended only for students in the Pitt summer edge in public health and global health program.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: CREQ: BCHS 2509 or EPIDEM 2110 or PUBHLT 2015; LEVEL: SOPHOMORES, JUNIORS, SENIORS

PUBHLT 1005 - PUBLIC HEALTH RESEARCH AND PRACTICE

Minimum Credits: 4
Maximum Credits: 4
This course will provide an internship and/or shadowing opportunity with a Pitt public health faculty member. Students will work individually or in pairs with a faculty mentor. There will be opportunities for laboratory, quantitative, or social science research, opportunities to work in the field with community organizations or health agencies, and opportunities to work in clinical settings. This course has no formal prerequisies. It is intended only for students in the Pitt summer edge in public health and global health program.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: CREQ: BCHS 2509 or EPIDEM 2110 or PUBHLT 2015; LEVEL: SOPHOMORES, JUNIORS, SENIORS

Public Service

PUBSRV 0020 - INTRODUCTION TO PUBLIC SERVICE

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the fields of public service. In addition to addressing the concept of public service, it provides students the opportunity to explore the various public service options. These include elected and appointed positions, volunteerism, and work in non-profit organizations. An effort will be made to give students an appreciation of the skills and talents required to effectively serve in these capacities. Classes will involve presentations by a variety of public service professionals, field visits and service learning opportunities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 0030 - PUBLIC POLICY PROCESS

Minimum Credits: 3
Maximum Credits: 3
Objective: to stimulate independent, critical and creative thinking about processes of public policy formulation in complex and rapidly changing environments. Course provides an approach to understanding interrelationships between elements of public policy (policy problems, policy alternatives, policy actions, policy outcomes, policy performance) and specific skills necessary to formulate and implement policies (problem identification, forecasting, recommendation, monitoring, and evaluation).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 0040 - PUBLIC SERVICE TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3
This course presents an overview of existing and emerging technologies that may be used by public service professionals to accomplish organizational goals or improve efficiency and effectiveness. Through discussions, readings, internet research and hands-on computer exercises, it will emphasize current information technology concepts, issues, and practices in the United States. In addition, it will provide students with a technology skill set utilized in subsequent courses and in the practice of a public service career.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 0050 - ETHICS AND ACCOUNTABILITY

Minimum Credits: 3
Maximum Credits: 3
This course is an undergraduate course offered through the Public Service major by the Graduate School of Public and International Affairs. It will be an introduction to Ethics and Accountability and will focus on enhancing the capacity of students to make difficult and necessary ethical choices on the basis of limited information and frequently conflicting values. The purpose of this course is that in their personal lives and future roles as professionals in a chosen field, students will face moral and unethical dilemmas that resist easy answers or a simpler formula and action.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1100 - PRACTICES IN PUBLIC ADMINISTRATION

Minimum Credits: 3
Maximum Credits: 3
Examines practices, issues and concepts in governmental administration. Course deals with such matters as current and best approaches to administration, administration and politics, organizational structure and behavior, and decision making.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 1110 - FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR

Minimum Credits: 3
Maximum Credits: 3
Participants are provided with an overview of the financial management concepts and practices. Stress is put on the strengths, weaknesses, and critical roles financial management plays in aiding public service managers to better realize their programmatic goals and objectives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1120 - HUMAN RESOURCES MANAGEMENT IN THE PUBLIC SECTOR

Minimum Credits: 3
Maximum Credits: 3
This course is an introductory survey of the understandings and skills needed by both managers and employees to cope with the myriad human resources management systems in public sector organizations. Specific topics include the history and evolution of human resources management, the legal environment, human resources planning, position classification and compensation, recruitment, promotion, termination, performance evaluation and training. Integrated with these topics will be the technical and legal concerns of labor relations and equal employment opportunity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 1130 - PLANNING IN THE PUBLIC SECTOR

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the profession of urban planning through a review of the historical development of cities. With this framework we will look at the actual work of the planner: data gathering, analysis, policy, public process and politics. We will address the relation between the physical nature of cities and the quality of community that develops. Course underscores the importance of physical and geographic determinants to city growth, and makes the connection between democratic values and city development policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1200 - PRACTICES OF NON-PROFIT MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Introduction to forms of non-profit organizations and their roles in American society. Course evaluates how non-profit organizations define their policy and service roles and examines the context of how they are organized, governed, financed, staffed, and managed. Other topics to be examined are law and philanthropy, voluntarism, strategic planning and marketing, training and developing boards, staff and volunteers, and ethical behavior.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1210 - FINANCIAL MANAGEMENT OF NON-PROFIT ORGANIZATIONS

Minimum Credits: 3
Maximum Credits: 3
Students are provided with an overview of the theories, practices and critical role of financial management in the non-profit sector. Major attention is focused on the tools and techniques that are necessary for the manager to effectively achieve an expanding mission in the face of a difficult and competitive revenue raising environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 1220 - HUMAN RESOURCE MANAGEMENT OF NON-PROFIT ORGANIZATIONS

Minimum Credits: 3
Maximum Credits: 3
This course is an introductory survey of the understandings and skills needed by both managers and employees to cope with the myriad human resources management systems in non-profit organizations. Specific topics include the history and evolution of human resources management, the legal environment, human resources planning, position classification and compensation, recruitment, promotion, termination, performance evaluation and training. Integrated with these topics will be the technical and legal concerns of labor relations, equal employment opportunity and volunteer management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 1230 - FUNDRAISING FOR NON-PROFIT ORGANIZATIONS

Minimum Credits: 3
Maximum Credits: 3
This course is intended to help students become familiar with the major sources of financial resources available to support the program activities of non-profit organizations. It will introduce students to the basic component of grant proposals and other revenue raising techniques i.e. plan giving, general appeals and endowments.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 1300 - LEGAL ISSUES IN PUBLIC SERVICE

Minimum Credits: 3
Maximum Credits: 3
Examines impact of law upon public service and manner in which legal implications condition formulation, adoption, and implementation of programs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Urban Studies

PUBSRV 1305 - HEALTH, LAW AND ETHICS

Minimum Credits: 3
Maximum Credits: 3
This course addresses legal and ethical issues encountered by health care practitioners as well as those working in health care management and public health. Strong emphasis is placed on legal and ethical issues that occur within the realm of direct patient care. Topics include, but are not limited to: advance directives, decision making capacity, informed consent, organ donation, end of life decision making, surrogate decision making, and confidentiality. Students will be able to articulate common health care ethics principles, theories, methodology, laws, and concepts and use the same to analyze health care ethics cases. Students will also develop concrete logical arguments in support of a chosen ethical stance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1310 - DIVERSITY ISSUES IN PUBLIC SERVICE

Minimum Credits: 3
Maximum Credits: 3
This course analyzes public service from the perspective of minorities and women. The minorities examined are black American men and women, with lesser attention given to ethnic minorities, those over 45 and the handicapped. The experience and aspirations of these several minorities will be examined in terms of how minority culture illuminates the nature of public service.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

PUBSRV 1315 - MANAGING PROJECTS AND CONTRACTS

Minimum Credits: 3
Maximum Credits: 3
This course provides students with the fundamentals of project management by examining key components of the project cycle, such as: problem identification, results-based planning and design strategies, implementation and scheduling strategies, monitoring and performance indicators, impact learning with evaluation studies, and data management and reporting systems. Students will also be introduced to team building concepts, managing project budgets, writing scopes of work, and legal issues in the management of contracts and administration of grants.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Urban Studies

PUBSRV 1320 - GEOGRAPHIC INFORMATION SYSTEMS IN THE PUBLIC SERVICE

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to geographic information systems software. In addition to familiarizing the student with the software, each student will apply that knowledge to a particular public problem selected by the student in consultation with the instructor. As this is a hands-on course, the format is a combination of lecture and lab/computer time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1340 - STRATEGIC PLANNING PUBLIC SECTOR

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to strategic planning and its application to the management of public organizations. As an introductory undergraduate course, students will be expected to gain a broad understanding of strategic planning and how it can be applied to mid and long term management of public organizations. Students will be introduced to the terminology used in strategic planning, several types of planning models, their steps and organization, and the importance of mission, vision, and values in strategic planning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1390 - THEORIES OF LEADERSHIP

Minimum Credits: 3
Maximum Credits: 3
This course is designed to acquaint students with multiple theories and practices associated with effective leadership. In answering the question, "what is leadership", it examines such theories as situational, participative, transformational, and servant leadership. It also addresses those leadership and administrative skills and practices usually associated with effective community organization and professional management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1425 - PRINCIPLES OF HOMELAND SECURITY

Minimum Credits: 3
Maximum Credits: 3
This course examines the new problems facing our domestic public service and justice personnel -- the borderless world of globalization and technology. Attention is paid to problems of terrorism, incident management systems, violence incident response procedures, planning for violence, changing federal, state, and local roles and response planning, weapons of mass effects, mass casualty programs, crime scene operations, technology and emergency responses, the evolving role of the intelligence community, and government, private, and non-government security issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

PUBSRV 1430 - TRIAL ADVOCACY 1

Minimum Credits: 3
Maximum Credits: 3
This course examines the mechanics of American civil and criminal litigation in both nonjury and jury trials. Topics include basic case analysis, effective advocacy skills, appropriate professional conduct, trial preparation, direct and cross examination of lay witnesses, and an introduction to the legal concepts of relevance and hearsay within the context of the federal rules of evidence. Students will participate in intensive class discussions and in-class presentations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: University Honors Course

PUBSRV 1435 - TRIAL ADVOCACY 2

Minimum Credits: 3
Maximum Credits: 3
This course further examines more advanced topics relating to the mechanics of American civil and criminal litigation in both nonjury and jury trials. Topics include the authentication and use of evidentiary exhibits such as documents, real evidence and demonstratives, the direct and cross examination of expert witnesses, character evidence, opening statements, and closing arguments. Students will participate in intensive class discussions and in-class presentations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: University Honors Course

PUBSRV 1455 - LAW, ETHICS AND PUBLIC POLICY IN THE MASS MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course examines a variety of public policy issues as those issues are impacted by the role and significance of the news and entertainment media. It explores mass media law and policy, with particular attention to regulatory practices.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

PUBSRV 1900 - INTERNSHIP SEMINAR

Minimum Credits: 1
Maximum Credits: 6
A supervised placement with a government or non-profit agency, or private sector organization undertaking public services. Students will meet several times during the semester with other students to review and discuss their public service experiences. CGS Public Service Majors and Non-Profit Management Certificate students are required to complete a minimum of a 3.0 credit internship. This internship course is optional for Public Service Minors and may vary from 1.0-6.0 credits. Instructor approval is required prior to enrolling in this course.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

PUBSRV 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Allow advanced student to pursue topics and research of special interest, which are not otherwise available. Course requires construction of plan of study or research on topic selected and approval of instructor who will supervise work.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

PUBSRV 1910 - INSTITUTE OF POLITICS INTERNSHIP/SEMINAR

Minimum Credits: 4
Maximum Credits: 4
While students are obtaining first-hand internship experience working with an official directly involved in policy making for the Pittsburgh region, they will learn in this seminar to analyze the policy-making process as an example of social problem-solving. They will learn the issues confronting

the region; they will study the policy-making process; finally they will analyze the method of participant observation.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

Quant Mthds/Operations Mgt

BUSQOM 0050 - QUANTITATIVE METHODS

Minimum Credits: 3
Maximum Credits: 3
Provides the foundations for two basic business disciplines; optimization and simulation. Various modeling concepts which have origins and have found wide applications in functional areas such as finance, marketing and operations will be studied in depth. The topics studied are linear programming; models of "go/no go" decisions and location decisions; "what if" analysis; decision analysis and multiple criteria decision making models; queuing models and statistical foundations to simulate business systems-input/output analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: STAT 1000 or 1040 or 1100 or 1131 or MGMT 0024 or ECON 0204; LVL: So, Jr, Sr; PROG: College of Business Admin

BUSQOM 1070 - OPERATIONS MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Provides foundations for managing operations technology manufacturing & service & discussion of operations management of conversion process. Field is centered on the fundamental problems of managers taking raw materials & transforming them efficiently/effectively into products resulting in satisfied customers. Topics: bottleneck & capacity analysis, capacity expansion; decoupling workstations-buffers versus internal & external variability; economies of scale in materials distribution; reorder point computations; distribution & logistics; & scheduling res; GT, JIT, CIM & FMS.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSQOM 0050; LVL: So, Jr, Sr; PROG: College of Business Admin

BUSQOM 1080 - DATA ANALYSIS FOR BUSINESS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to enhance the statistical and analytical skills of Pitt Business students, who have already taken the required STAT 1100 or STAT 1000 course, to the level necessary for them to deal with Data Mining and other essential material in the Business Analytics Certificate. The course should also be of interest to students exploring the analytical parts of other areas, such as marketing. The goals of the course are to: (1) cover material not currently treated in STAT 1100, but which is preparatory to Data Mining; (2) provide software skills in statistical packages used in business, such as SPSS, SAS, or R; and (3) provide experiential exposure to business applications of the material.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: STAT 1000 or 1100 (Min Grade 'B')

BUSQOM 1085 - APPLIED BUSINESS ANALYTICS PROJECT

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

BUSQOM 1090 - APPLIED OPTIMIZATION AND SIMULATION

Minimum Credits: 3
Maximum Credits: 3

The purpose of this course is to enhance the problem-solving skills of Pitt Business students to the level necessary for them to deal with complex decision problems using optimization and simulation. Building on the foundation provided in the required BUSQOM 0050 Quantitative Methods course, the topics herein will include linear, nonlinear, integer, multiple objective and stochastic optimization. Simulation topics will include both spreadsheet simulation and process simulation. The goals of the course are to: (1) provide advanced modeling skills in optimization and simulation; (2) provide skills in software packages used in business, such as the Analytic Solver Platform and Arena; (3) get practice on asking the right questions, on dealing with problem complexity, on critical thinking and on gleaning insights to complex problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSQOM 0050; MIN GRADE 'B'

BUSQOM 1715 - OPERATIONS MANAGEMENT INDEPENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of operations management issues or problems to which they have been introduced in other operations management courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

BUSQOM 1720 - OPERATIONS MANGEMENT INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
The operations management internship provides business credits for project assignments that augment a professional operations management work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

BUSQOM 1725 - GLOBAL SUPPLY NETWORKS AND MANUFACTURING CULTURES IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
The course provides students with the fundamentals of international supply chain methods with a special focus on Latin America and Uruguay. It will feature a 2-week study visit to Uruguay where students can place their understanding of those concepts within a cultural context. The course involves significant teamwork and allows students to complete an in-depth analysis of the global supply networks and manufacturing culture in Latin America with Uruguay as a reference point.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Requirements: Restricted for College of Business Administration
Course Attributes: Hourly Final

BUSQOM 1745 - SIX SIGMA THEORY AND PRACTICE

Minimum Credits: 3
Maximum Credits: 3
Six Sigma theory and practice has been designed to provide the student with: "strong theoretical knowledge of the six sigma green belt body of knowledge. Practical, hands-on, experience with the Six Sigma methodology. A Katz Six Sigma green belt certificate, for students earning a grade of "B" or better. Six Sigma is a disciplined, data-driven approach to process improvement aimed at the near-elimination of defects from every product, process, and transaction. Lean topics will be included in this course. Six Sigma utilizes the following five-phase problem solving methodology known by the acronym DMAIC: 1. Define the projects, the goals, and the deliverables to customers (internal and external). Describe and quantify both the defect and the expected improvement. 2. Measure the current performance of the process. Validate data to make sure it is credible and set the baseline. 3. Analyze and determine the root cause(s) of the defects. Narrow the causal factors to the vital few. 4. Improve the process to eliminate defects. Optimize the vital few and their interrelationships. 5. Control the performance of the process. Lock down the gains. To integrate theory and practice, students will be grouped in teams and work under the mentorship of a Six Sigma black belt on an industry client field project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSQOM 1760 - DATA MINING

Minimum Credits: 3
Maximum Credits: 3
Data mining is the process of extracting useful information and knowledge from a set of data. Mining is typically done on data sets too large to be analyzed by hand, but the same techniques are applicable to small, complex data. This course is an introduction to the most popular methods used in managerial data mining, and provides experience in using commercial software to explore real data sets. Models considered include those from statistics, machine learning, and artificial intelligence, such as discriminate analysis, logistic regression, clustering, neural nets, tree/rule induction, and association rule modeling. This course is methods-oriented, as opposed to being methodology-oriented, so students learn about when and how to use techniques and how to interpret their output rather than the details about how those techniques work. A laptop computer is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSQOM 1790 - SUPPLY CHAIN MANAGEMENT INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The supply chain management internship provides business credits for project assignments that augment a professional supply chain management work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: Restricted for College of Business Administration

Quechua/Kichwa

QUECH 0101 - QUECHUA 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, Latin American Studies

QUECH 0102 - QUECHUA 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0441 or QUECH 0101; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: DSAS Second Language General Ed. Requirement, Global Studies, Latin American Studies

QUECH 0103 - QUECHUA 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0442 or QUECH 0102; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: DSAS Second Language General Ed. Requirement, Global Studies, Latin American Studies

QUECH 0104 - QUECHUA 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0443 or QUECH 0103; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: DSAS Second Language General Ed. Requirement, Global Studies, Latin American Studies

QUECH 0105 - QUECHUA 5

Minimum Credits: 3
Maximum Credits: 3
With around 10 million speakers, Quechua is the most commonly spoken of the indigenous languages in South America. In this class, you will learn intermediate Language skills in order to further your communication in Quechua. You will also continue to learn about Quechua culture and Andean realities, building off of two previous years of Quechua study as well as the summer Pitt in Bolivia program. In addition to focusing on Quechua language and culture, we also will dedicate substantial time to Quechua linguistics. You will participate in the structure of the class, as this is a tailored course. The main goal of this intermediate course is for you to continue to develop the skills necessary to communicate in Quechua. These skills include listening, reading, speaking, and writing. Equally important for communication, you will also deepen your understanding of the various cultural, historical, and political contexts in which Quechua is situated. We will continue our exploration of the multiple Quechua varieties. You will develop your knowledge of Quechua linguistics to complement your research plans.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

QUECH 0106 - QUECHUA 6

Minimum Credits: 3
Maximum Credits: 3
With around 10 million speakers, Quechua is the most commonly spoken of the indigenous languages in South America. In this class, you will learn intermediate Language skills in order to further your communication in Quechua. You will also continue to learn about Quechua culture and Andean realities, building off of two previous years of Quechua study as well as any experiences you have had in Quechua speaking communities. In addition to focusing on Quechua language and culture, we will dedicate time to Quechua linguistics. You will participate in the structure of the class, as this is a tailored course. The main goal of this intermediate course is for you to continue to develop the skills necessary to communicate in Quechua. These skills include listening, reading, speaking, and writing. Equally important for communication, you will also deepen your understanding of the various cultural, historical, and political contexts in which Quechua is situated. We will continue our exploration of the multiple Quechua varieties. You will develop your knowledge of Quechua linguistics to complement your language skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

QUECH 0111 - INTRODUCTION TO QUECHUA LANGUAGE IN BOLIVIA

Minimum Credits: 3
Maximum Credits: 3
This study abroad course will provide a basic introduction to the Quechua language for students with no or very little background in Quechua. It does not take the place of QUECH 0101 - Quechua 1 taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

QUECH 0112 - CONTINUING QUECHUA LANGUAGE IN BOLIVIA

Minimum Credits: 3
Maximum Credits: 3
This study abroad course provides students with some background in Quechua to continue their language study. It does not take the place of a regularly sequenced Quechua language course taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

QUECH 0131 - INTENSIVE KICHWA IN ECUADOR 1

Minimum Credits: 3
Maximum Credits: 3
This course is an introductory Kichwa language course for students with no or very little background in Ecuadorian Kichwa.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

QUECH 0132 - INTENSIVE KICHWA IN ECUADOR 2

Minimum Credits: 3
Maximum Credits: 3
This study abroad course is a continuation of QUECH 0131 Intensive Kichwa in Ecuador 1.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

QUECH 0133 - INTENSIVE KICHWA IN ECUADOR 3

Minimum Credits: 3
Maximum Credits: 3
This study abroad course is a continuation of QUECH 0132 Intensive Kichwa in Ecuador 2.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

QUECH 0134 - INTENSIVE KICHWA IN ECUADOR 4

Minimum Credits: 3
Maximum Credits: 3
This study abroad course is a continuation of QUECH 0133 Intensive Kichwa in Ecuador 3.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

QUECH 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

QUECH 1905 - UNDERGRADUATE TEACHING ASSISTANT IN QUECHUA

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

QUECH 1909 - SPECIAL TOPICS IN QUECHUA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Rehabilitation Science

REHSCI 1000 - PRINCIPLES OF RESEARCH METHOLOGY

Minimum Credits: 3
Maximum Credits: 3
The study of the nature of research and the applications of the scientific approach in the research procedures. The course focuses on concepts, design techniques and interpretations, as well as limiting factors and ethical considerations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (STAT 0200 or 1000 or 1020 or 1131) or (PSY 0201 or 0270); MIN GRADE: 'C-' for listed courses; PLAN: Rehabilitation Science (BS, BSH, BPH)
Course Attributes: Departmental Final

REHSCI 1018 - SURVEY OF HEALTH AND REHABILITATION PROFESSIONS

Minimum Credits: 2
Maximum Credits: 2
Course will employ an interdisciplinary faculty team to introduce students to health science professions in physician assistant studies, physical therapy, athletic training, occupational therapy, speech language pathology and audiology, rehabilitation counseling, health information management, rehabilitation technology, emergency medicine, and prosthetics and orthotics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit

REHSCI 1200 - HUMAN ANATOMY

Minimum Credits: 3
Maximum Credits: 3
This course uses lecture and laboratory experiences to teach the anatomical structures of the human body. Content focuses on gross human anatomy with particular reference to the musculoskeletal, nervous, cardiovascular and respiratory systems. Emphasis has been laid on application of knowledge of human anatomy in diagnostics of commonly encountered diseases/injuries. Students are encouraged to use their knowledge of anatomical structures learned in class to create such clinical scenarios as a part of learning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: [(BIOSC 0150 or 0170 or 0715) or (BIOL 0110) or (BIOENG 1070)] and [(BIOSC 0050 or 0057 or 0058 or 0070) or (BIOENG 1070) or (BIOL 0101 or 0111)] or BIOSC 0190

REHSCI 1201 - HUMAN ANATOMY LAB

Minimum Credits: 1
Maximum Credits: 1
This course uses lecture and laboratory experiences to teach the anatomical structures of the human body. Content focuses on gross human anatomy with particular reference to the musculoskeletal, nervous, cardiovascular and respiratory systems. Emphasis has been laid on application of knowledge of human anatomy in diagnostics of commonly encountered diseases/injuries. Students are encouraged to use their knowledge of anatomical structures learned in class to create such clinical scenarios as a part of learning.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: CREQ: REHSCI 1200

REHSCI 1205 - HUMAN PHYSIOLOGY

Minimum Credits: 4
Maximum Credits: 4
This basic human physiology course covers general physiological processes, muscles, blood and lymph, body fluids, renal function, respiration, metabolism, and the nervous, gastrointestinal, cardiovascular and endocrine systems. Problem-based formats will be introduced with particular reference to those problems seen in clinical settings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: [(BIOSC 0150 or 0170 or 0715) or (BIOL 0110) or (BIOENG 1070)] and [(BIOSC 0050 or 0057 or 0058 or 0070)] or (BIOENG 1070) or (BIOL 0101 or 0111)]; MIN GRADE: 'C-' for listed courses

REHSCI 1210 - NEUROSCIENCE

Minimum Credits: 4
Maximum Credits: 4
This course studies the basic structure and function of the central and peripheral nervous system. There is an emphasis on the effects of lesions of the nervous system on human function and disability.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (REHSCI 1200 and 1205) or (BIOSC 1250 or 1070) or (NROSCI 1250) or (NUR 0013 and 0003); MIN GRADE: 'C-' for listed courses; PLAN: Rehabilitation Science (BS; BS-H; BPH)

REHSCI 1215 - EXERCISE PHYSIOLOGY

Minimum Credits: 2
Maximum Credits: 2
This course focuses on the effects of exercise in preventing and treating disability, in optimizing the rehabilitation process, and in maintaining the health of those with disabilities. The course emphasizes the effects of exercise on the various body systems, including the cardiovascular, neuromuscular, and musculosketetal, in individuals with disabilities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (REHSCI 1205) or (BIOSC 1250 or 1070) or (NROSCI 1250) or (NUR 0013 and 0003); MIN GRADE: 'C-' for listed courses

REHSCI 1216 - EXERCISE PHYSIOLOGY LAB

Minimum Credits: 1
Maximum Credits: 1
Required lab component for REHSCI 1215 Exercise Physiology: This course focuses on the effects of exercise in preventing and treating disability, in optimizing the rehabilitation process, and in maintaining the health of those with disabilities. The course emphasizes the effects of exercise on the various body systems, including the cardiovascular, neuromuscular, and musculosketetal, in individuals with disabilities.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PREQ: (REHSCI 1205) or (BIOSC 1250 or 1070) or (NROSCI 1250) or (NUR 0013 and 0003); MIN GRADE 'C-" for listed courses; COREQ: REHSCI 1215

REHSCI 1217 - ADVANCED HEALTH ASSESSMENTS AND EXERCISE PRESCRIPTION

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to teach students the knowledge and skills necessary for performing health assessments and designing exercise programs for a variety of populations. Students will learn how to perform health screening and how to properly assess fitness parameters such as body composition, cardiorespiratory fitness, muscular fitness, and flexibility. Students will also learn how to design and implement exercise programs for healthy individuals, as well as those with chronic health conditions or disease. The pathophysiology of the disease process will also be discussed. Potential populations of interest include active and sedentary adults, youth, older adults, pregnancy, osteoporosis, arthritis, cancer, cardiopulmonary diseases, obesity, eating disorders, and depression.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: REHSCI 1215 (MIN GRADE "C-"); PLAN: Rehabilitation Science (BS, BPH, BS-H)

REHSCI 1218 - EMERGING BIOMEDICAL TECHNOLOGIES

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide the students with an understanding of stem cell biology, tissue engineering, and related applications involved in rehabilitation sciences and regenerative medicine. The course material is designed to aid students considering a future as researchers in biomedical sciences laboratories or biotechnology research and development. It will provide digests of the latest research technologies and clinical applications in these fields. Students will be encouraged to synthesize concepts aimed to test solutions and therapies to improve human health by use of modern biomedical technologies. The lecture and discussion format gives students a broad background and the opportunity to apply critical thinking skills to recent published findings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

REHSCI 1220 - KINESIOLOGY AND BIOMECHANICS

Minimum Credits: 2
Maximum Credits: 2
Course will cover the functional anatomy and biomechanics of the major joints of the human body and the application of mechanics to describe and analyze normal and pathological human movement. Students will be analyzing muscle function and joint motions involved in an exercise or functional activity, palpating muscle groups and bony landmarks, testing the strength of a muscle group, and demonstrating exercises to stretch or strengthen various muscles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: REHSCI 1200 and (PHYS 0101 or 0110 or 0140 or 0150 or 0174); MIN GRADE "C-" for all listed courses

REHSCI 1221 - KINESIOLOGY AND BIOMECHANICS LAB

Minimum Credits: 1
Maximum Credits: 1
Required lab component for rehsci 1220 kinesiology and biomechanics: course will cover the functional anatomy and biomechanics of the major joints of the human body and the application of mechanics to describe and analyze normal and pathological human movement. Students will be analyzing muscle function and joint motions involved in an exercise or functional activity, palpating muscle groups and bony landmarks, testing the strength of a muscle group, and demonstrating exercises to stretch or strengthen various muscles.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: Letter Grade
Course Requirements: PREQ: REHSCI 1200 and (PHYS 0101 or 0110 or 0140 or 0150 or 0174); MIN GRADE 'C'-' for all listed courses; CREQ: REHSCI 1220

REHSCI 1225 - INTRO TO REHABILITATION SCIENCE

Minimum Credits: 1
Maximum Credits: 1
This course will introduce students to the criteria on which they will be judged in the graduate school application process and topics related to professionalism. Recommended readings will prepare the student to develop basic skills for reading and interpreting research articles. Various researchers and clinicians from within the University of Pittsburgh and the University of Pittsburgh Medical Center will be invited to share their research studies and/or clinical experiences and perspectives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: H/S/U Basis
Course Requirements: PLAN: Rehabilitation Science (BS, BSH, BPH)

REHSCI 1230 - REHABILITATION ETHICS

Minimum Credits: 2
Maximum Credits: 2

This course explores ethical issues of: human value development, decision making, basic principles of health care, the nature of rights, confidentiality and management of health care information, professional gate keeping as a function of role fidelity, autonomy and paternalism, justice and the allocation of scarce resources, withholding and withdrawing life support, euthanasia, abortion, AIDS and health care practice, genetic science, and trans-cultural health. Students will work in teams to create presentations from these various topics for their colleagues. This is a highly interactive program of instruction and requires student be actively engaged in the learning process.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Rehabilitation Science (BS, BSH, BPH)

REHSCI 1235 - MEDICAL TERMINOLOGY

Minimum Credits: 1
Maximum Credits: 1
This course is designed to introduce students to the fundamentals of medical terminology. It includes word structure of basic medical and surgical terms and procedures, body parts and organs, body systems, selected medical specialties, and commonly used medical abbreviations and symbols. This course is a self-directed learning course, using a programmed text, with online quizzes (through Blackboard) and a final exam administered in a classroom.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

REHSCI 1240 - ISSUES IN HEALTH CARE

Minimum Credits: 3
Maximum Credits: 3
This course is intended as a survey of current health care issues in the United States and will focus on major trends, issues and problems facing health care professionals and policy makers. In particular, an overview of the US health care system, the role of government, its payers (public and private), health policy, regulatory and accrediting bodies, and an analysis of timely challenges and issues are discussed. Specific topics covered are intended to be representative (not all inclusive) of public and/or service delivery issues widely discussed in current literature. Class participation and assignments will focus on application of principles discussed to current and emerging issues.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Rehabilitation Science (BS, BSH, BPH)

REHSCI 1245 - HUMAN DEVELOPMENT

Minimum Credits: 3
Maximum Credits: 3
This course follows the development of individuals and highlights the role of rehab science professions from conception until the end of life. It combines theory, research, and practical applications from developmental psychology. Lecture topics include genetic influences on development; prenatal and birth factors; physical, cognitive, social, personality, and cultural variables that influence development across the life-span.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: PSY 0010 or 0101 or 0200; MIN GRADE "C-" for all listed courses

REHSCI 1250 - PATHOPHYSIOLOGY/HUMAN DISEASE

Minimum Credits: 4
Maximum Credits: 4
This course has been designed as an extension of Physiology, in an effort to provide pre-clinical students with a foundational scientific knowledge and conceptual understanding of pathophysiological processes. The course fundamentally focuses on general mechanisms of disease that are typically applicable to multiple body regions and/or organ systems. In addition to these general mechanisms, focus is also afforded to the pathogenesis of systemic conditions, again, due to their influence on the patient as a whole.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: REHSCI 1205 or (BIOSC 1250 or 1070) or NROSCI 1250 or (NUR 0013 or 0003); MIN GRADE "C-" for all listed courses; PLAN: Rehabilitation Science (BS or BS-H or BPH)

REHSCI 1265 - PHARMACOLOGY IN REHABILITATION

Minimum Credits: 3
Maximum Credits: 3
This course serves as a foundation to general pharmacology, and begins with lectures on the general principles affecting drug response: drug absorption, distribution, metabolism and excretion. The major drug categories will then be discussed, with an emphasis on drug classification, mechanism of action, side effects (especially those that are predictable), and significant drug interactions. At the completion of this course, the student will be able to recognize and describe the action of prototype drugs in each major drug category, compare and contrast their action with other drugs in each category, and explain the role of those drugs in the mitigation, treatment, cure or prevention of disease in humans.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: REHSCI 1205 or (BIOSC 1250 or 1070) or NROSCI 1250 or (NUR 0013 and 0003); MIN GRADE "C-" for all listed courses; PLAN: Rehabilitation Science (BS, BSH, BPH) or Athletic Training (BS, BSH, BPH)

REHSCI 1275 - INTRO TO OCCUPATION SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course provides the foundation for understanding the role of activity and occupation in life-span human development by first considering human behavior in the absence of activity/occupation and then in the presence of activity/occupation. Consideration is given to the influence of inactivity and immobility on human systems (biologic, psychological and psychosocial) including knowledge of the disuse syndrome and the deleterious effects of living in stimulus deprived environments (such as nursing homes). The course also examines human behavior in the presence of activity/occupation including the role of movement and purposeful activity (occupation) as determinants of health.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Rehabilitation Science (BS or BS-H or BPH)

REHSCI 1280 - PSYCH AND SOCLGY OF DISABILITY

Minimum Credits: 3
Maximum Credits: 3
Topics covered in this course include individual and societal views of persons with disabilities; both historical and current trends are discussed including disability rights legislation, independent living options, access to everyday living activities, education, employment, assistive technology, and the need for ongoing advocacy, as described by various guest speakers with disabilities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Rehabilitation Science (BS, BSH, BPH)

REHSCI 1285 - INTRO TO EVIDENCED-BASED REHAB

Minimum Credits: 3
Maximum Credits: 3
This course provides basic skills in reading, reviewing, and critiquing the research literature in the rehabilitation sciences. These skills will be applied to the relevant literature in diagnosis, prognosis and intervention strategies within the spectrum of rehabilitation science. Students will learn to generate relevant research questions and utilize an evidence-based medicine approach to the review, appraisal and synthesis of current research articles within the fore-mentioned areas. The course will culminate in an individualreviewproject aimed at the development and resolution of one particular research question, using the best, current available literature. A basic understanding of research methods, design and or statistics is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Rehabilitation Science (BS or BS-H or BPH); PREQ: REHSCI 1000 or PSY 0035 or SOC 0230

REHSCI 1290 - PRACTICAL ISSUES IN DISABILITY

Minimum Credits: 3
Maximum Credits: 3
This course will review the natural progression of several age and non-age related physical disabilities such as Alzheimer's and Dementia, Parkinson's disease, CHF, COPD, DM, Spinal Cord injury, and Multiple Sclerosis (subject to change). When possible, individuals with disabilities

are invited to participate in classroom discussions to share their first-hand experiences of living with a disability. This course will likely include an observational experience outside the classroom. This may include traveling to someone's home with a disability and/or their place of employment via public or a student's private mode of transportation. Additional details will be reviewed on the first day of class.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Rehabilitation Science (BS, BPH, BPH)

REHSCI 1292 - DIVERSITY AND CULTURAL ISSUES IN HEALTH, DISABILITY AND REHABILITATION

Minimum Credits: 3
Maximum Credits: 3
This course provides a forum for exploring issues of diversity and multiculturalism as they affect both daily interactions and professional practice in health care and rehabilitation. In this course students will build a greater understanding of: personal culture; how factors of culture and diversity influence an individual's health, living needs, and response to stress; international concepts of disability and health & rehabilitation services; and globalization and its relationship to rehabilitation. In addition, students will learn how to apply concepts of cross-cultural competence and intercultural communication to clinical services and program development.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Rehabilitation Science (BS, BSH, BPH)

REHSCI 1295 - FIELD EXPERIENCE

Minimum Credits: 1
Maximum Credits: 3
Designed to fulfill the assistive technology in rehabilitation certificate field experience requirement. This course provides an opportunity to interact with assistive technologies, persons who use assistive technologies and with assistive technology researchers and providers.The student will work with the Field Experience Coordinator to make arrangements with aclinicalfacility and will work with a Faculty Advisor to develop a set of objectives for this experience. The student will be expected to participate a total of 45 hours per credit hour sought. Grade will be determined by Faculty Advisor based on evaluation by the clinical facility and student's internship journal, a written summary of the clinical experience, and if more than 1 credit sought, a research paper.Students are required to complete online training modules and a physical exam, including documentation of up-to-date immunizations and TB test prior to registration. Other policies may apply based on the chosen field experience site.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis

REHSCI 1296 - ASSISTIVE TECHNOLOGY IN REHABILITATION FIELD EXPERIENCE

Minimum Credits: 1
Maximum Credits: 3
Designed to fulfill the assistive technology in rehabilitation certificate field experience requirement. This course provides an opportunity to interact with assistive technologies, persons who use assistive technologies and with assistive technology researchers and providers. The student will work with the Field Experience Coordinator to make arrangements with a clinical facility and will work with a Faculty Advisor to develop a set of objectives for this experience. The student will be expected to participate a total of 45 hours per credit hour sought. Grade will be determined by Faculty Advisor based on evaluation by the clinical facility and student's internship journal, a written summary of the clinical experience, and if more than 1 credit sought, a research paper. Students are required to complete online training modules and a physical exam, including documentation of up-to-date immunizations and TB test prior to registration. Other policies may apply based on the chosen field experience site.
Academic Career: Undergraduate
Course Component: Clinical
Grade Component: H/S/U Basis
Course Requirements: PLAN: Assistive Technology in Rehab (ATR-CR2)

REHSCI 1297 - CROSS-CULTURAL INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Designed to provide an opportunity to fulfill the RS program global citizenship requirement through extensive cross-cultural immersion and independent study. Students will draw from previous cross-cultural experiences or will work with their independent study faculty advisor to identify an appropriate community service agency with which to volunteer. Additional academic work will help student identify the characteristics of their own culture and learn about the culture of the community in which they are working, as well as the issues affecting its members' health including understanding and treatment of disabilities. Academic credits will be assigned according to number of hours spent in the community and academic work completed.

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Requirements: PLAN: Rehabilitation Science (BS or BS-H or BPH)

REHSCI 1299 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Provides advanced students an opportunity to explore in depth and area of particular interest to them. It is the student's responsibility to find a faculty member willing to undertake such a tutorial.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SU3 Elective Basis

Religious Studies

RELGST 0025 - MAJOR BIBLICAL THEMES

Minimum Credits: 3
Maximum Credits: 3
An examination of the Jewish and Christian experience of God and the coherent use of major themes throughout the Jewish and Christian Bibles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 0083 - MYTHOLOGY IN THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
This course examines in cultural context the traditional stories--myth, legend, and folktale--of the ancient Greeks and Romans. Theories drawn from various disciplines are critically evaluated. Attention to connections with ritual practice and to expression in daily life, art, architecture, etc.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Geographic Region General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

RELGST 0084 - MYTH IN ANCIENT WORLD/WRITING PRACTICUM

Minimum Credits: 1
Maximum Credits: 1
Writing practicum for students taking RELGST 0083 as a writing course.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

RELGST 0090 - MYTH IN THE ANCIENT NEAR EAST

Minimum Credits: 3
Maximum Credits: 3
The myths of the ancient Near East are among the earliest written interpretations of the world and human existence. They are also among the most enduring, although they have only been unearthed in the last 200 years. In this course, we read myths from ancient Mesopotamia, Ugarit, and Israel. We study the myths as literary works, representative of the ideas and issues of the original cultural context in which they were shaped. These myths offer insight into the religious mentality of the ancient Near East, as well as societal and political issues. We examine themes such as the presentation of the life of the gods, the relationship between the human and divine worlds, the issues of mortality and immortality, existence, fertility, kingship, and ethics. The primary goal of this course is to better understand these myths as they existed and developed in their ancient settings. Of course, because the myths are expressions of human thought, we may find that in studying them we also come to better understand ourselves.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 0105 - RELIGIONS OF THE WEST

Minimum Credits: 3
Maximum Credits: 3
This course is a historical introduction to the religious traditions that developed in ancient Near East and the Mediterranean. Our major emphasis is on the history of the religious traditions that emerged in late antiquity which continue to as the major monotheistic religions: Judaism, Christianity and Islam. We focus on key concepts, historical developments, and contemporary issues. Throughout the course, we also examine interactions among these religious traditions and will make use of documentary film and sacred art to illustrate. In the final segment of the course we examine the issue of secularization and the rise of the category of the non-believer, or "none." The course also serves as an introduction to the academic study of religion and provides a foundation for further coursework in Judaism, Christianity, and Islam. No prior knowledge of any of the religions studied is expected or assumed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 0115 - BIBLE AS LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This introductory course acquaints students with what is in the bible and provides background information drawn from various disciplines about the elements and issues that give it its distinctive character. Attention is necessarily given to its religious perspectives, since they govern the nature and point of view of the biblical narratives, but no specific religious view is urged.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Humanistic GE. Req.

RELGST 0135 - CHRISTIAN BIBLE

Minimum Credits: 3
Maximum Credits: 3
An introduction to the text of the Christian bible.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 0205 - INTRODUCTION TO JUDAISM

Minimum Credits: 3
Maximum Credits: 3
Major themes of the Jewish tradition from biblical to modern times are explored.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 0283 - US AND THE HOLOCAUST

Minimum Credits: 3
Maximum Credits: 3
With increasing interest in the Holocaust in Europe, this course focuses on the American side of the Atlantic - on issues of anti-Semitism and anti-immigrant sentiment in this country and on America's response to the holocaust. We will also look at some post-Holocaust issues as well.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 0305 - CLASSICS OF CHRISTIAN THOUGHT

Minimum Credits: 3
Maximum Credits: 3
An introduction to some of the major Christian thinkers and their principal themes in the medieval and modern period.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 0405 - WITCHES TO WALDEN POND

Minimum Credits: 3
Maximum Credits: 3
Why did the prosecution of witches become a priority for the Puritan rulers of New England? What religious ideals convinced Henry David Thoreau to lead a life 'off the grid' in Walden Pond? How did non-Protestant immigrants make their way in the new nation? And how did religious rhetoric undergird the debates over slavery that led to the civil war? These are some of the questions that we will explore in this course, which traces the religious history of the United States from the era of colonization to through the Civil War.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 0415 - RELIGION IN MODERN AMERICA

Minimum Credits: 3
Maximum Credits: 3
The course examines the impact of religion as a moral, intellectual, and institutional force in America from 1865 to the present. Despite claims that the nation was becoming less religious, at least seven new religions were founded in the U.S. After the civil war, while millions of migrants from southern and eastern Europe brought large numbers of Catholics and Jews to challenge the dominance of protestants. We seek to understand how religions have both shaped and reflected economic, social, and cultural conditions in the united states. The course combines lecture with student discussion of religious conflicts and critical moments of cultural change, using primary sources and secondary interpreters. We also engage documentary films, slides, and local museums and historical sites. Major emphases include religious responses to intellectual, scientific, and economic change, including biblical criticism, evolutionary theory, immigration, urbanization, industrialization, Marxism, fascism, racism, and feminism. We conclude with questions about the present day: is the united states an exception for its high levels of religious behavior or is secularism on the rise?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 0417 - THE BLACK CHURCH

Minimum Credits: 3
Maximum Credits: 3
An introduction to the course and historical development of the black church in America, its contribution to the social and religious progress of black people, black leadership, and struggles including the civil rights movement, black theology and other social movements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 0435 - RELIGION, FILM AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Alexis de Tocqueville famously called the United States "a nation with the soul of a church." Ironically, his observation refers to a nation whose constitution forbids the establishment of any official religious identity (while simultaneously allowing for "free," voluntary, religious "exercise"). The result--a vibrant spiritual marketplace characterized both by diversity and innovation and a clinging to traditional identities--has marked American culture and the broader stories it tells about itself. In this course we'll read closely in "secular" literary texts (including novels , graphic novels, short stories, poetry, drama, film, and music) with some attention to short, relevant readings in religious thought, practice, and history, aiming for two related objectives: 1) to observe the overt ways religions appear in and contribute to these texts--symbolically, rhetorically, schematically, etc.--and 2) to consider how presumably "secular" literature functions religiously, giving form and coherence to the ambiguities of American experiences, identities, and crises that remain in flux, constantly under revision. Readings will include both "classic" and more contemporary works by Gwendolyn Brooks, Willa Cather, Mark Twain, Flannery O'Connor, William Styron, Oscar Hijuelos, Art Speigelman, August Wilson, James

McBride, the Cohen Brothers, and/or others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

RELGST 0454 - RISE OF ISLAM: 500-1200 CE

Minimum Credits: 3
Maximum Credits: 3
This course seeks to impart an understanding of the Islamic tradition by exploring the religion's formative period. It integrates two intertwined themes: (1) early Islamic empires as geopolitical formations; and (2) the development of ideas - from ritual to philosophy to law. The first centuries of Islam are fascinating for many of the same reasons they are complex and even controversial: Surviving primary sources are fragmented, partisan, and often retrospective; a tremendous range of voices competed to define the new religion; and nearly all subsequent Muslim thinkers would harken back to this period to legitimize their own positions. The central goal is to develop an understanding of the diversity of voices in this early period and consider why certain conceptualizations of religion displaced others; and then follow those voices beyond the Arabian Peninsula to examine manifestations in the North African and Central Asian borderlands.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 0455 - INTRODUCTION TO ISLAMIC CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
This course aims to introduce students to Islamic and Middle Eastern History from the time of the Prophet (ca. 600 C.E.) to the Iranian Revolution in 1979. We will proceed chronologically, focusing mainly on political events. However, a special emphasis will be given to the formation of the Islamic tradition, its evolution across different regions and cultures in time, and its interaction with other traditions. In the modern era, we will particularly explore the Islamic societies' political, cultural, and military encounter with the rising power of the West in the Middle East. In addition to the several historical processes and developments such as modernization, nation-building, Islamic fundamentalism and globalization, which have shaped the history of the Middle East in the last two centuries, our class discussions will also touch on the main theoretical perspectives that have stamped the studies of Islam and the Middle East. Here, concepts such as orientalism, defensive development, and modernity will constitute our main focus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Global Studies, Medieval & Renaissance Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 0505 - RELIGION IN ASIA

Minimum Credits: 3
Maximum Credits: 3
This course serves as an introduction to the major religious traditions of South and East Asia. During the course of the semester, we encounter Hinduism and Jainism; the native Confucian, Daoist (Taoist), and popular traditions of China; and the Shinto, folk and new religions of Japan. Buddhism, which originated in India but later spread to East Asia, is examined in its relation to the history of both Chinese and Japanese religions. We approach these traditions through lectures and discussion based on Chinese classical and popular literature, secondary scholarship, and films, which inform us about cultural and historical context, beliefs, practices, and personal experience. In the process we expect to learn something about the ways in which non-Western religious traditions see themselves and their world on their own terms, and to see how/if they can complement our own worldviews.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 0525 - RELIGION AND CULTURE IN EAST ASIA

Minimum Credits: 3
Maximum Credits: 3
Words have consequences. How a society defines "religion" and "culture" have much to say about how they balance individual freedom and

collective responsibility. This course focuses on how religion has been and is practiced in East Asia in modern and contemporary times. We begin with an overview of the major religions in the region (e.g., Confucianism, Daoism, Buddhism, Shinto, folk traditions), and examine various themes to help us learn how religion influences the lives of individuals and the wider societies in which they live. Themes dealt with include the relationship between religion and politics and law; nationalism, terrorism, and secularization; gender, sexuality, and the family; healing, the environment, and ethical behavior; and the life cycle and ritual calendar year. By looking at how these issues unfold in modern China and Japan and at their global significance enable us to better understand how religion shapes our world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 0710 - SOCIOLOGY OF RELIGION

Minimum Credits: 3
Maximum Credits: 3
This course will compare and contrast major classical and modern sociological theories of religion, including discussion of the renewed focus on religion in mainstream, general theory. Attention will be narrowed to a focus on the relation between religions, states and individuals in comparative and historical perspective.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

RELGST 0715 - PHILOSOPHY OF RELIGION

Minimum Credits: 3
Maximum Credits: 3
This course examines topics central to philosophy of religion, including arguments for and against the existence of God, the nature of religious experiences, the relation between faith & reason, the personal and cultural usefulness of religion & religious practices, and religious responses to evil (theodicy). Members of the class will develop a working knowledge of the issues by reading and discussing traditional and contemporary scholarly texts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Ethical/Policy GE. Req., West European Studies

RELGST 0760 - RELIGION AND RATIONALITY

Minimum Credits: 3
Maximum Credits: 3
Does--and should--religion have a role in the secular sphere? How does culture shape religion? Is faith compatible with reason? This course critically examines how both religious and nonreligious thinkers have navigated the question of the relation between faith and reason throughout the history of Western thought. Special attention will be paid to evaluating how the relationship between religion and philosophy developed within Christianity, Judaism, and Islam. A further emphasis will be given to how the relationship between religion and philosophy shapes the our approach to myth, race, gender, and science.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

RELGST 0770 - SCIENCE AND RELIGION

Minimum Credits: 3
Maximum Credits: 3
Are science and religion at odds or harmonizable? Do they coincide or represent completely separate discourses? This course examines the relationship between science, rationality, faith, and religion. Special attention will be given to ancient creation narratives and their interpretation, historical dialogues regarding faith and reason in the Western monotheist faiths (Christianity, Judaism, Islam), the scientific revolution, and various approaches to evolutionary theory. We will also consider practical, contemporary issues such as neuroscience and religious practice, ecology and faith, and scientific views toward gender and race.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

RELGST 1100 - ISRAEL IN THE BIBLICAL AGE

Minimum Credits: 3
Maximum Credits: 3
This course explores the history and development of the people of Israel in ancient times. What do we know about the Israelites and how do we know it? Using biblical texts and archaeological remains, students will learn about everyday life in ancient Israel, the role of class and gender, life-cycle events, religious festivals, political institutions, systems of belief, and famous personages in history and lore. The trajectory of the course will begin with the Near Eastern origins of the people, continue through the rise of the Israelite and Judahite monarchies, and end with the Second Temple commonwealth of Judea in the Persian and Hellenistic periods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1102 - THE HISTORY OF GOD

Minimum Credits: 3
Maximum Credits: 3
God has a history. In the earliest days of that history, God was worshipped as one of a plethora of deities controlling various spheres of cosmic activity or the human world. Students in this course will learn about this ancient pantheon - how gods functioned in society and how their presence was experienced by those devoted to them. They will then trace the evolution of the God of Israel from a mountaintop deity of the southern Levant in the late second millennium BCE to a supreme deity worshiped by a small group of absolute monotheists based in Jerusalem in the mid-first millennium BCE. Students will become more sophisticated readers of biblical texts in the process. The sources of the Hebrew Bible reflect not a homogeneous monotheism, but rather a diverse set of belief systems tending toward henotheism or even polytheism. By appropriating and reinterpreting the religious myths of their neighbors, the Israelites arrived at a character of the divine that has proven problematic to many contemporary theologians, particularly on issues of LGBT rights, women's rights, and the environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1112 - BIBLE AS LITERATURE 2

Minimum Credits: 3
Maximum Credits: 3
This course continues Bible as Literature, and students will examine various forms of biblical literature including prophecy, apocalyptic literature, wisdom literature, psalms and poetry, New Testament epistles, and narrative materials not covered in the earlier course. We will consider these works in terms of literary form and style, and in their origin historical and cultural contexts. We will also read non-biblical texts from the ancient world that help us to better understand the Bible as a literary work.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

RELGST 1120 - ORIGINS OF CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course presents a historical-critical investigation of Christian origins. Special attention is paid to varieties of 1st century Hellenistic and Palestinian Judaism within the Greco-Roman world. Primary readings include selected Biblical passages and apocrypha, 1st century historians and philosophers (Josephus, Tacitus, Suetonius, and Philo), the New Testament corpus (including Paul and the Pastorals), and selected readings from the Dead Sea Scrolls. In addition there will be assignments from various modern New Testament critics, historians, and theologians.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1130 - VARIETIES OF EARLY CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course will examine the many different and often competing forms of Christianity that existed during the first five centuries of our common era. We will include an historical survey of Mediterranean culture and society in the historical Roman Empire to help us understand the ways in which Christianity developed in relation to the philosophical, sociological, theological, and political environment of this period. We will also focus on the contribution of the early varieties of Christianity to modern Western views of the relationship between the individual body and society. The literature of this period represents a broad variety of beliefs and practices ranging from philosophical views of god and matter (and the nature of each), to notions of life-long celibacy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1135 - ORTHODOX CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course is designed as an overview of the history, teachings and rituals of Orthodox Christianity in its multinational context. Geographically, this context refers primarily to southeastern Europe (aka the Balkans), Russia and the coastal areas of the eastern Mediterranean. The course examines specific historical experiences of Orthodox Christians, starting with Byzantine empire, through major historical shift in the life of the Christians under Ottoman rule and, finally, to the diverse experiences of various autocephalous churches under communism. Through lectures, readings, discussions, films, and a field trip to a local Orthodox church, students will gain an insight into and broaden their awareness of the multifaceted world of Orthodox Christianity, its spiritual practices, rich artistic, musical and ritual expressions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, Medieval & Renaissance Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1142 - THE CONSTRUCTION OF EVIL IN WESTERN RELIGIOUS TRADITIONS

Minimum Credits: 3
Maximum Credits: 3
Why is there evil in the world and who or what is responsible for it? How can we reconcile a belief in a good God with the existence of evil? Even without the theological underpinning, in secular terms, evil poses a problem about the worlds intelligibility. This course undertakes a historical analysis of the various ways in which ancient and medieval minds pondered these questions and their solutions to the problem. We begin our survey with the monism of Hebrew Scriptures then move to the changes brought on by Persian culture and the Hellenization of the Mediterranean basin after the conquests of Alexander with the introduction of Dualism. Dualism is a theory or system of thought that recognizes two independent and mutually irreducible principles, which are sometimes complementary and sometimes in conflict. The course focuses on the polarities of "good" and "evil" (and the methods by which "evil" is defined), specifically highlighting the evolution of the emergence of the Devil in Judaism and Christianity and the social construction of good and evil in the Western tradition. At the same time, we consider the rationalization of "our" good against the evil of "others," or the issue of religious intolerance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1143 - DEATH IN THE NAME OF GOD

Minimum Credits: 3
Maximum Credits: 3
The roman empire understood Christianity to be an illegal and superstitious movement, and a threat to the traditions of their ancestors. Subsequently, many Christians were charged with the crime of "atheism," and put to death, as atheism was equivalent to treason. Who were these people who voluntarily embraced their own deaths as a vindication of their faith, and how did Rome justify their extinction? How were they understood by their pagan and Jewish neighbors? This course explores the cultural, political and religious context of Christian martyrs, beginning in second temple Judaism. We then analyze their stories (martyrologies), imperial transcripts and legislation, and examine the later (Christian) imperial legislation against "heretics." this background helps motivate discussions of contemporary "martyrs," such as "suicide bombers," the political ramifications of such behavior, who gets to decide if someone is a martyr, and reactions to the public spectacle of dying as the ultimate religious act.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1144 - CLASSICAL MYTHOLOGY AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course examines how authors of classical antiquity used the traditional figures and stories of their culture's mythology as material for works of literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

RELGST 1145 - GRECO-ROMAN RELIGIONS

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to religious texts and traditions in a formative era of Western civilization and culture. Our focus will be on the variety of religious expression in Greco-Roman culture, which flourished in the geo graphical area of the Mediterranean basin during the first five centuries of the common era. We consider debates about nature of the gods and access to them (through oracles, rituals, and magic), the emergence of the idea of the holy person, and a variety of religious traditions as expressed in prayer, ritual, and art, and religion and politics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

RELGST 1148 - RELIGIONS OF ANCIENT EGYPT

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to ancient Egyptian religious thought and practice with its massive temples, multitude of gods and goddesses and fascinating funeral rites. We explore the mythic cycle of Creation and the Osiris cycle of betrayal, revenge, death and rebirth, as well as the place of myriad local and minor deities within Egyptian mythology. We also consider the dynamics of the "monotheistic" revolution of Akhenaton. In the historical and cultural context of ancient Egypt, students encounter the interaction of sacred and secular, and the relationship between state cults and private worship by nobles and commoners alike. A special feature of the course includes group projects to design educational materials for the 'Egyptian Exhibit' for the Carnegie Museum. To that end, the course includes a session at the Carnegie Museum of Natural History.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1151 - DEATH IN THE MEDITERRANEAN WORLD

Minimum Credits: 3
Maximum Credits: 3
In many cultures, people sometimes ask fundamental questions about their existence, including, "what happens after we die?" This course will focus on the evolution of beliefs and rituals related to death and the afterlife in and around the ancient Mediterranean basin, including Egyptian, Greek, Etruscan, and Roman cultures. Using an interdisciplinary approach, we will combine methodologies from anthropology, classics, history, and religious studies. Topics to be covered include myths of the afterlife, books of the dead, magic and death rituals, funeral practices and paraphernalia (disposal of the dead), cults of the dead, divinization, heaven and hell, judgment, and the impact of christianization on the ancient understanding of death.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

RELGST 1160 - JERUSALEM: HISTORY AND IMAGINATION

Minimum Credits: 3
Maximum Credits: 3
The holy city of Jerusalem is at the heart of the western religious imagination and of contemporary political conflict in the middle east. Traditionally it has been a center of religious pilgrimage, home to Israelite kings and Islamic caliphs. Today it is a cutting-edge urban center marked by stunning demographic diversity, a rapidly expanding economy, and an intractable political crisis. In this course, we will examine the history of the city-from its earliest days to today-with an eye toward its religious significance in Judaism, Christianity, and Islam. Special attention will be given to

Jerusalem's changing urban fabric: its architecture, neighborhoods, natural resources, economy, and religious institutions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1170 - ARCHAEOLOGY OF ISRAEL-PALESTINE

Minimum Credits: 3
Maximum Credits: 3
Is archaeology in a place like Israel-Palestine an objective science? In this course, we explore how past and present are linked as nation-states and religious communities utilize the archaeological record to mold identities and to forward certain narratives. Our focus will be on the major archaeological sites of Israel-Palestine, particularly in Jerusalem and its environs. We will explore the political and religious issues that have emerged from or surround their excavation. Archaeology in the Holy Land has long been driven by a desire to shed light on - or even authenticate - the Bible, while the "exotic Orient" was explored in the 19th and early 20th centuries through western expeditions and excavations that served to further colonial interests. These religious and political motivations persist even if their manifestations have shifted with time. Through site tours, museum visits, student-led discussions, talks with local experts, and even a day participating in an archaeological excavation, students will gain direct experience with the places that have aroused controversy because of their problematic relationship to biblical and other ancient texts and/or because of their location in politically contested space.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1210 - JEWS AND JUDAISM IN THE ANCIENT WORLD

Minimum Credits: 3
Maximum Credits: 3
This course covers the development of Classical Judaism from the Second Temple Period, beginning with the end of the Babylonian Exile in the 6th century BCE, and continues up through the emergence of Rabbinic Judaism, culminating with the redaction of the Babylonian Talmud in the 6th century CE. We cover both the major historical trends as well as the major religious developments. The course also introduces students to the major Jewish texts of both the Second Temple Period and the Rabbinic Period, emphasizing close readings of primary texts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1220 - JEWS AND JUDAISM IN THE MEDIEVAL WORLD

Minimum Credits: 3
Maximum Credits: 3
An introduction to the facets of medieval and early modern Jewish life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1232 - MODERN EASTERN EUROPEAN JEWRY

Minimum Credits: 3
Maximum Credits: 3
This upper level undergraduate course surveys the history of the historically most numerous portion of European Jewry from the medieval period to the present, emphasizing the modernization of east-central European Jews as minorities in the context of their host societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1240 - JEWS AND THE CITY

Minimum Credits: 3
Maximum Credits: 3
Comedian Lenny Bruce riffed in 1963 that "If you live in New York or any other big city, you are Jewish. It doesn't matter even if you're Catholic; if you live in New York you're Jewish." In this course, we will discover why Lenny Bruce -- and so many other observers of Jewish life -- came to understand urbanity as a core component of the Jewish experience. We will begin our study of the Jewish encounter with urban life in the 19th century, as millions of Eastern European Jews migrated from the small villages of their birth to cities across the globe. This course will trace this Eastern European Jewish diaspora to urban destinations around the world, before training its lens on the Jewish encounter with American cities. We will pay close attention to how patterns of Jewish urbanization changed regionally and over time; how urbanization affected Jews' home-life, leisure time, religious practices and occupational choices; how differences in gender and class affected Jews' experiences in urban spaces; and how Jews interacted with other ethnic groups in diverse, urban environments. Delving into the history, built environment, and archival sources pertaining to the Jewish experience in Pittsburgh will provide us with a dynamic case study for this crucial relationship between Jews and the city.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1241 - GENDER AND JEWISH HISTORY

Minimum Credits: 3
Maximum Credits: 3
How did a Jewish teenager named Henriette Herz become the belle of berlin high society in the late 18th century? Why did 19th century Zionist thinkers like Theodor Herzl and Max Nordau think it so important to transform Jewish men into 'muscle Jews?' why did ray frank, a Jewish woman from San Francisco who did not think that women should be rabbis, feel compelled to lead the first high holiday service ever held in Spokane, Washington? And how have trans* Jews challenged the conventions of contemporary Jewish life? These are some of the questions that we ask in gender in Jewish history, a course that places gender and its effects at the center of Jewish modernity. We take an international approach to this history, traveling through Europe, the Americas, and the middle east to show how Jews negotiated gender identity and gender roles in numerous contexts and under varying political and social circumstances. In exploring such themes as religious practice, politics, education, anti-Semitism, work, and family, we see how gender indelibly marked every aspect of Jewish life over the past two hundred years.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1250 - JEWS AND JUDAISM IN THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
Were we examine the specific challenges that the modern period posed to existing Jewish life and the nature of the responses made by Judaism to those challenges.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1252 - HOLOCAUST HISTORY AND MEMORY

Minimum Credits: 3
Maximum Credits: 3
The holocaust - that is, the genocide of six million Jews in Nazi-occupied Europe during World War II - was a critical event of the early twentieth-century that continues to resonate today. Our historical survey will look at the holocaust primarily through the experiences of its Jewish victims, though we will discuss some of the other groups, such as the roma, disabled people, and gay men, who were also targeted and systematically murdered by the Nazis. Additionally, we will think about the perpetrators of the holocaust and the ideologies that led to the genocide, such as racism, nationalism, and antisemitism. Finally, we will move beyond the history of the holocaust to think about the ways that this event has been remembered and reconstructed by survivors, nations, institutions, museums, the arts, popular culture and the media. Looking at how institutions here in Pittsburgh commemorate the holocaust will offer us local, concrete examples of how people continue to grapple with this history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, Global Studies,

Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1256 - MODERN ISRAEL AND PALESTINE

Minimum Credits: 3
Maximum Credits: 3
We trace the history of modern Israel from the idea of the return in the second half of the 19th century through the state of Israel today.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1258 - ISRAELI AND PALESTINIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Reading literature from places of conflict provides an opportunity to go beyond headlines and gain insight into the day-to-day existence, desires, imaginings, and perspectives of the people who live there. Reading literature also reveals how religious values and practices become a part of everyday culture and how those values are embraced or challenged. This course will introduce students to the literature produced by Israeli and Palestinian authors, with a focus on how contemporary issues in Israeli and Palestinian society are depicted by writers from each culture. Topics will include: how these writers construct place; the role of religious texts in literature; conflicts and community within each society; how literature helped shape an Israeli national consciousness and a Palestinian national consciousness; how Israeli and Palestinian writers imagine the other; and the role of the Shoah in Israeli literature and the Nakba in Palestinian literature. The course will equally focus on developing students' academic and reflective writing skills. Students will produce a combination of literary analysis and self-reflective writing that uses techniques of creative nonfiction. Together, these writing assignments will help students respond to both the course texts and the cultural experience of studying in Israel-Palestine.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

RELGST 1260 - AMERICAN JEWISH EXPERIENCE

Minimum Credits: 3
Maximum Credits: 3
We analyze the Jewish experience in America since the middle of the 18th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies, West European Studies

RELGST 1280 - MODERN AND CONTEMPORARY JEWISH THOUGHT

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the varieties of Jewish thought, which developed out the of the 19th and 20th centuries and to the present day. After exploring the historical context of the philosophical legacy of Jewish thought, we will consider how Jewish intellectuals sought to reimagine their Jewish faith and Jewish identity in response to various concerns in the 19th and 20th centuries. Specifically, we will analyze Jewish responses to modernity and secularism, Jewish engagement with Western culture and Christianity, political theory (e.g, Marxism) and matters of social justice, Jewish feminism, and the prospect of ethics and religious faith after the Holocaust.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement

RELGST 1320 - MEDIEVAL HISTORY 1

Minimum Credits: 3
Maximum Credits: 3
Survey course in the social, political, economic and religious history of Europe from the Diocletian reforms to the year one thousand. Special attention to interpreting the primary documents and to integrating various areas of activity (e.g. economic and religious). Focus on France, England, Germany, and Italy.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1330 - MEDIEVAL HISTORY 2

Minimum Credits: 3
Maximum Credits: 3
Survey course in the social, political, economic and religious history of Europe from the year 1000 to the black death. Special attention to interpreting the primary documents and to integrating various areas of activity (e.g. economic and religious). Focus on France, England, Germany, and Italy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1335 - MEDIEVAL SPAIN

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1360 - INTRODUCTION TO THE RENAISSANCE

Minimum Credits: 3
Maximum Credits: 3
The idea of the Renaissance is central to Western culture. Many of our values and tastes devolve from--or consciously react against--patterns that were established or reinterpreted five hundred years ago. The student who explores the renaissance, therefore, gains hold of one of the keys of Western civilization. He or she also acquires practice in critical reading, discussion, and the written expression of ideas.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Medieval & Renaissance Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1370 - GLOBAL CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course takes Christianity as a prism through which to consider the origins and growth of global religions. Christianity has tried to achieve a global status since its inception in the ancient Mediterranean world in the first century CE. Stemming from Paul's fateful decision to evangelize the Gentiles, Christianity has long sought to achieve a global network of believers, who now comprise about 20% of the world's population. We will study Christian globalization in the twentieth and twenty-first centuries and focus on two Christian traditions, Catholicism and Pentecostalism, as examples of religions that have deliberately and successfully globalized. We will ask if the contemporary values of and pluralism relativism are good for religions and religious people. And, where religion is no longer a powerful cultural force, what are the prospects for a purely humanitarian approach to common problems in a globalizing world?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1372 - CATHOLICISM IN THE NEW WORLD

Minimum Credits: 3
Maximum Credits: 3
The course will examine the history of the Roman Catholic church since 1492 in the Americas using various moments of internal crisis or external conflict as focal points for study. Topics will include: missionary and military contact with New World indigenous populations after 1492; the

minority situation of Catholics in the new United States; the Irish famine and its global consequences; conflicts between Catholic ethnic groups; the impact of Catholic support for fascist regimes in the 1930s and 1940s; counter cultural forms of Catholicism (conscientious objectors, civil rights activists, pacifists); Vatican ii and its impact; liberation theology, Marxism and structural reform in Latin America; shifting theological positions on social and moral issues; the current sexual abuse crisis; the pope Francis effect. While the emphasis will rest upon the social, economic, and political dimensions of Catholic history, the course will also address the aesthetic and cultural legacy of Catholicism including sacred architecture, music, and the arts, in elite and popular forms.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

RELGST 1380 - RELIGION RIGHT NOW: MEDIA AND RELIGIOUS NEWS IN CONTEMPORARY AMERICA

Minimum Credits: 3
Maximum Credits: 3
It is apparent that Americans devote enormous media attention to the coverage of celebrities, movies and sports, but deal much less skillfully with news coverage of religion. Yet, a glance at any daily news source, print or digital, reveals the pervasiveness of news that involves religious beliefs, conflicts, and practices, and that requires basic knowledge of religious traditions. The purpose of this course is to develop student skills at reading and interpreting current news stories about religious topics in print and visual media (newspapers, journals, blogs, polls, and television) in order to increase understanding of important religious issues in the contemporary United States, including American coverage of international religious events and leaders. Instruction will include lecture, discussion, film, and small group exercises to report on current events.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1402 - HEALTH AND RELIGION

Minimum Credits: 3
Maximum Credits: 3
What is healthâ??an absence of illness or something more? What is healingâ??a physical process or something that is not limited to the physical? In order to answer these seemingly basic questions, a host of assumptions about the body, its ideal state, and the kinds of changes to which it can or should be subjected are often implicit. Religious attitudes toward the body and the natural world have a tremendous impact on these assumptions. In this course, you will gain a better understanding of this impact by exploring the relationships between religion and health and seeing these relationships as part of a much larger web of human concerns such as nationalism, resistance to colonization, and gender politics. In order to facilitate cross-cultural comparison and understanding, this course is not organized around geography or history, but rather around the structure human body. After two introductory weeks, each three-week unit will consider a particular aspect of human health through cases drawn from a wide variety of religious contexts. This process is aimed at decentering Western narratives about health, healing, and the body while fostering a more global perspective.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

RELGST 1405 - RELIGION AND SEXUALITY

Minimum Credits: 3
Maximum Credits: 3
From Puritan attempts to control women's sexuality to contemporary debates over reproductive rights and gay marriage, religion and sexuality have played a formative role in the political and social history of the United States. Though American political ideologies have often tried to situate both sexuality and religion as private matters that have no bearing on public life, the topics we discuss in this course reveal that quite the opposite is true. We take a chronological approach to our subjects, locating the intersections between religion and sexuality throughout the course of American history. In the process, we'll discover how competing ideas regarding religion and sexuality have transformed, and continue to transform, American politics, culture, and society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1415 - RACE AND RELIGION IN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1417 - PHILOSOPHY OF RACE AND RELIGION

Minimum Credits: 3
Maximum Credits: 3
The history of European religious thought (particularly Christianity) and the development of the idea of race are interwoven. While many devoutly religious people throughout history have, no doubt, been part of movements to oppose the horrific acts that occurred under colonization, end slavery, oppose Nazi anti-Semitism, or promote Civil Rights, for example, the very concept of separate races and the promotion of the ideal of white supremacy were in many ways innovations of European Christian theology. Indeed, religious arguments for white supremacy undergird many of the justifications for colonization and genocide, for slavery, and for Jim Crow laws and apartheid. As a result, despite important developments toward equality, racism remains ubiquitous and part of the underlying logic of the religious, political, and cultural milieu of American society, even if its effects often remain unnamed or are less explicit. This course is a philosophical exploration of the intersections of race, racism, and religious thought. It begins with an analysis of the philosophical and religious positions that solidified and promoted the idea of race, traces the entanglement of Western philosophy and Christian theology with racist political ideologies, and presents critical responses to race from African-American philosophers and liberation theologies. It ends by evaluating the continued effects of racism in American culture and religious thought and considers how we might both understand and respond to the epistemological, phenomenological, and existential effects of white supremacy in Western thought.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement

RELGST 1418 - FROM VODOU TO SANTERIA: RELIGIONS OF THE WEST AFRICAN DIASPORA

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the study of West African Diaspora religions in the Americas. We define "diaspora" as the spread and dispersal of people of African descent, both forced and voluntary, through the slave trade, imperial and colonial displacements, and postcolonial migrations. In what form do African religious expressions exist in the African Diaspora communities? This course exposes students to the indigenous African foundations of the religious beliefs and religious practices of African communities living in the Diaspora. Students will receive historical, ethnographical, and anthropological approaches to grasp the essence of these non-doctrinaire and non-textual religions focused on a rich memory of African deities, rituals, morality and practices that have been passed from generation to generation. Because most of the Africans forced to migrate to the New World as slaves came from West Africa, this course will provide students with insights into the beliefs and practices of the "Yoruba Religions" also known as the "Afro-Atlantic religions" such as Santeria in Cuba; Vodou in Haiti; Shango in Trinidad and Grenada; Candomblan Brazil among others. Topics to be covered in this course will include sources of African religious beliefs, African theological notions about God and the Universe, African conceptions about the nature of the human being, witchcraft and the problem of Evil in African religious thought and practice, illness, health, death, and ancestor worship. Furthermore, we will also pay close attention to less known Afro-American cults and religions containing Amerindian mythology and shamanism that emphasize divination, healing, and spirit mediumship such as: the Maria Lionza cult in Venezuela, The Palo Monte in Cuba, and the Garifuna Dugu in Central America. A special feature of the course will include the analysis of "spirit possession" as a common denominator to African-derived religions as well as a relevant keystone in transmission dynamics. Finally, we will examine how these religions have survived cultural and ideological assault and have continued to provide spiritual resources for societies rooted in African cosmologies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1420 - RELIGION AND RACE

Minimum Credits: 3
Maximum Credits: 3
This course examines the intersections of religion, race, and racism. Recently, scholars of religion have demonstrated that religious identities are often racialized as well. In this course, we will discover that religion and race are both modern categories rooted in post-enlightenment ideas about what it means to be human. We will see how the establishment of these religious and racial categories led to new hierarchies and inequalities. We will discuss how post-enlightenment thinkers linked religion and race, and how their ideas played a role in european imperialism. We will also investigate how the discipline of religious studies has developed its analytical tools with a racialized understanding of religion. The course will examine case studies in which religion has been racialized, and consider the political ramifications of these examples. In particular, we will think about the impact of white supremacy on black religion in the united states, the complicated relationship between antisemitism and islamophobia, and contemporary islamophobia in the us. Finally, we will explore the possibilities of anti-racism through faith-based scholarship and activism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements

RELGST 1425 - POPULAR RELIGION IN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Students will examine forms of religion that are called everyday, folk, local, or popular traditions, in contrast to "official" denominational categories that so often dominate the study of religion. With our focus on the western hemisphere, we will learn about new local practices that have emerged since 1492 among African, Caribbean, and native American peoples and to analyze how they represented responses to colonization, industrial capitalism, or globalization. Examples of popular traditions that we will study include: witchcraft; santeria, voodoo, saint's cults, miracles, pilgrimages, speaking in tongues, faith-healing and snake-handling. The course method is interdisciplinary, drawing upon anthropology, documentary film, history, religious studies, psychology, and sociology.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1427 - RELIGION AND LAW

Minimum Credits: 3
Maximum Credits: 3
Religion and Law examines the role of religious freedom in American history, from colonial days to the present, focusing on documents that predate the first amendment of 1791, as well as upon central supreme court cases that helped define what "legal religion" means as a category in the United States. Students will read court cases and become familiar with arguments for and against the ideal of religious freedom, including court cases involving the Amish, Mormons, Santeria, and the use of religious symbols in public places.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

RELGST 1428 - RELIGION AND SPORTS

Minimum Credits: 3
Maximum Credits: 3
This course will provide an overview of research into the relationship of sports, spirituality, and religion. The approach will be cross-cultural with an eye to ancient and non-Western cultures. Informed by anthropological discourse on ritual theory and cultural performance, we will compare sports fandom to religious devotion, sporting venues to holy spaces, and athletes to revered religious figures. We will examine large sporting events such as the Olympics or the Super Bowl as ceremonial activities, rich with symbolism, rather than simply business or entertainment ventures. Seeking to understand the sense of connectedness and deeper meaning that sports can provide, we will also learn to appreciate how athletes can draw on religious belief or ritualized behavior to enhance their performance. After getting acquainted with academic discourse on the main terms of our inquiry-religion, sports, ritual theory, and cultural performance - we will move through an assortment of case studies. They will include sports and ritual among the ancient Greeks, Romans, Mesoamericans, and Native Americans. For the modern era we will consider sporting rituals in North America and Asia. We will also learn about beliefs in divine agency in modern sports, as well as instances where sports and religion have come into conflict.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1438 - RELIGION AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course will be to consider the public and political implications of religion in several different political systems. We will begin with an overview of the implications for politics of various types of religious systems. Religious beliefs and institutions have wide ranging implications for civic norms, public policy, political leadership, and the treatment of various social groups, including women and minorities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1440 - RELIGION AND POLITICS OF THE MIDDLE EAST

Minimum Credits: 3
Maximum Credits: 3

This course focuses on the role of religion in the politics of the contemporary middle east. A general survey of the role of religion in the history of the region, and a cross regional historical-comparative view of the relationship between religious phenomena and political movements and institutions set the context for an investigation of the politics of religion in recent developments in the region.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1445 - MUSLIM POLITICS IN REAL TIME

Minimum Credits: 3
Maximum Credits: 3
Media representations and news stories about the 'muslim world' often project a troubling ahistorical and sensationalist narrative about a region torn by violence, fanaticism and corruption. This information literacy-driven course will teach you how to place current events in the muslim world or involving people of muslim background in their historical context. It will also teach you to discern what constitutes a valid news source and how to find sources you can trust. We'll develop the skills necessary to make sense out of a news landscape that presents conflicting accounts of the same story and that fails to cover some stories altogether. You'll leave this course with a command over how to find news, how to read news, and then how to make sense of it through rigorous historical and social scientific analysis. To that end, you'll learn how to locate and evaluate scholarly sources with the same rigor as you do news sources. You'll be provided with a number of key aspects and developments in the history of the 'muslim world', so that even if you have no prior knowledge of islamic history you will be familiar with the key terms and themes. You will be introduced to the long history of problematic media portrayals of muslims and the muslim world and efforts to both critique and change these representations. We will work intensively with a librarian to master a set of basic information literacy skills at the start of the semester that we will grow and refine as the class progresses. The remainder of the class syllabus will be determined by the current news cycle, which will generate topics to be considered for further historical analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1450 - ISLAM, LAW, AND POLITICS

Minimum Credits: 3
Maximum Credits: 3
The emergence of modern Islamic political movements worldwide has had not only a profound impact on contemporary global geo-politics but has also triggered heated debates around the question of the compatibility of Islam with liberal democracy. This class investigates the "vexed" relation between Islam and politics, profoundly influenced by the experience of colonialism, and standing in complex relationship to concepts such as the modern nation-state, democracy, liberalism, or secularism. The class will combine empirically grounded studies the multiple facets of past and contemporary Muslim politics in Muslim-majority and minority contexts with a more theoretical investigation of modern Islamic political thought; here it will examine its intellectual origins, its arguments, the challenge it poses to its liberal counterparts, but also its conundrums and contradictions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1452 - HYMNS & HIPHOP: SOUNDS OF ISLAM

Minimum Credits: 3
Maximum Credits: 3
From its inception, the Islamic tradition has placed a heavy emphasis on the word and on listening to the word, and has developed a rich and ambiguous relationship to sound. This course draws on theological, historical, anthropological and theoretical perspectives to investigate the this relationship. We discuss various scholarly approaches to the senses, the relationship between listening and power, and the changing conceptions of what it has meant to listen in Islamic culture. In particular, we discuss how new media technologies and popular culture have transformed sound in Muslim communities, and how the ongoing "war on terror" has refashioned Islamic soundscapes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1455 - ISLAM IN EUROPE

Minimum Credits: 3
Maximum Credits: 3
Since 9/11 Europe has become increasingly anxious about its multi-racial and multi-religious populations, the result of successive waves of non-European immigrants who have, since the end of WWII, made Europe their home. At the heart of these concerns is the question whether followers of the Muslim faith can successfully be integrated into a European society that identifies culturally as Judeo-Christian and defines its social order as

secular. The different public debates triggered by this anxiety center on the question of the legitimate limits of cultural difference within liberal democratic societies, thereby also reflecting a growing unpopularity of multicultural ideals. Political discourses stress the need for a robust defense of liberal values that migrant communities (especially Muslim communities) must accept. In order to achieve that, various governmental techniques have been deployed, which are now considered as an essential part of European counter-terrorist strategies, along with security policies and stricter migration controls. Interestingly, many of these government techniques involve gender and sexual politics, which are at the heart of policies and discourses around integration and multiculturalism. The course will look critically at these various developments through an interdisciplinary approach that combines anthropological studies with readings from political and social theory, feminist and queer studies in order to think about the issues at stake around Islam, religious pluralism and secular governance in Europe. As additional course material, the class will draw on a variety of audio-visual material, such as fiction films, documentaries, or youtube clips.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1456 - ISLAM IN ASIA

Minimum Credits: 3
Maximum Credits: 3
Although Islamic traditions are generally associated with the Middle East, the vast majority of the world's Muslims live in the Asia-Pacific region. Countries such as India, Pakistan, Bangladesh, and Indonesia are home to vibrant and diverse Islamic traditions. This course introduces students to Asian Muslim communities and their histories, tracing the development of Asian Islamic traditions from their early roots in the medieval period through the age of colonialism and until the current day. Students will learn about mystical Islamic practices (Sufism), Islamicate art and architecture, and the regional diversity of lived Islam. We will also examine contemporary conflicts around Islamic identity in Asia, particularly in China and Myanmar, and debates about the place of Islam in modern governments and public life. In the process, students will explore primary historical sources and contemporary studies to examine the role of gender, ethnicity, nationality, and culture in the study of diverse Muslim communities in Asia.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

RELGST 1457 - CONTEMPORARY ISLAM: INTERNAL DEBATES

Minimum Credits: 3
Maximum Credits: 3
From the second part of the 19th century, Muslim intellectuals have been involved in an intensive ideological/theological debate. While this debate was prompted by the strong presence and influence of the west, it has not been simply a debate between the Islamic fundamentalism and the western world. The modernist and fundamentalist debates of the last century are primarily the internal debates around historically significant issues that transformed Islamic intellectual traditions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1458 - WOMEN AND ISLAM IN ASIA

Minimum Credits: 3
Maximum Credits: 3
This course is a comprehensive engagement with Islamic perspectives on women with a specific focus on the debates about woman's role and status in Muslim societies. Students will learn how historical, religious, socio-economic and political factors influence the lives and experiences of Muslim women. A variety of source materials (the foundational texts of Islam, historical and ethnographic accounts, women's and gender studies scholarship) will serve as the framework for lectures. Students will be introduced to women's religious lives and a variety of women's issues as they are reported and represented in the works written by women themselves and scholars chronicling women's religious experiences. We will begin with an overview of the history and context of the emergence of Islam from a gendered perspective. We will explore differing interpretations of the core Islamic texts concerning women, and the relationship between men and women: who speaks about and for women in Islam? In the second part of the course we will discuss women's religious experiences in Asia, which will serve as a focus for our case study. Students will examine the interrelationship between women and religion with special emphasis on the ways in which the practices of religion in women's daily lives impact contemporary Asia. All readings will be in English. No prior course work is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1475 - RELIGIOUS DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
What is the best way to accommodate religious and cultural diversity within a nation-state and in civil society? How should individual rights to practice religion be balanced with communal needs? Should freedom from religion be protected as much or more than freedom of religion? These are pressing contemporary issues in many countries, including the United States, but issues of religious diversity and questions of whether and how to tolerate religious minorities have a long history. In this course, we will examine the toleration of minority religions in particular historical settings, and the issues and problems (both doctrinal and social/political) that societies grappled with as they confronted diverse religious landscapes. We will also use these historical precedents as a lens to examine contemporary examples of religious pluralism, diversity, and conflict. Case studies will mainly be drawn from pre-modern Europe and modern Europe and North America, but we will also look at Mughal and modern India and discuss religion in pre-modern China.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1510 - HINDU MYTHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the religious life of India as expressed through storytelling. Central to this life are rich and diverse narrative traditions, both oral and written, some of which have their roots in the ancient Vedic literature, in the famous epics of the Mahabharata and the Ramayana, in popular folk tales and philosophical debates. Through an in-depth exploration of different genres of primarily Hindu narrative traditions, students will be able to see (1) how certain episodes and characters from the selected stories have been used in religious and philosophical teachings about spiritual emancipation and liberation; (2) how the stories and their protagonists have been variously (re)cast over time by members of dominant as well as non-dominant religious and/ or political groups; and also, (3) how they have been appropriated and incorporated in politically sensitive times and situations into a wider narrative of nation(hood). The role of popular media (TV, film, etc.) In linking nation and narration in modern times will also be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1511 - YOGA: OF LOINCLOTHS AND LULULEMON

Minimum Credits: 3
Maximum Credits: 3
Is yoga culturally appropriative? This question and others like it have produced heated debate on college campuses and beyond. It is the aim of this course to add nuance to these popular debates by exploring the politically fraught history of yoga. Under the British Empire, Hindu religious reform and physical culture intertwined, leading to the development and spread of modern postural yoga as a form of anti-imperial resistance. In the early twentieth century, Indian proponents of yoga worked as cultural ambassadors and entrepreneurs, spreading their practices to the West. In postcolonial India, yoga often shows up in clinical settings as an inexpensive and culturally familiar alternative to biomedicine, but has also served as a venue for some religious militants to assert their masculinity through physical fitness. Meanwhile, by the late twentieth century, yoga became a booming industry in the West and was marketed, especially to middle-class women, as an "exotic" lifestyle commodity at times.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

RELGST 1515 - GENDER AND RELIGION IN INDIA

Minimum Credits: 3
Maximum Credits: 3
As robust debates about gender and equality take place in India today, this course seeks to provide a nuanced historical perspective on how gender is understood and practiced in different communities in the region. This course introduces students to major debates about gender in India, exploring the intersections between gender, religion, class, caste, and nationhood in the colonial and postcolonial eras. We will enter these debates through surveying discourses of femininities and masculinities as they are elaborated in religious texts and contemporary society and politics. Students will also be introduced to the discussions about third gender and queer identities in India. Specific topics covered will include gender identities in mythology and religious practice in Hindu, Muslim, and Buddhist traditions; gender roles in family and society; transgender identity and religion; and the impacts of colonialism, globalization, and migration on gender and sexuality.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1517 - MOUNTAINS AND MEDICAL SYSTEMS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1518 - RELIGION AND ECOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course explores various religious perspectives on the meaning and value of nature and the relationship of humans to the environment. How have different religious communities conceived of the natural world and responded to ecological crisis? How have food and farming practices been shaped by religious tradition? Special attention will be given to case studies from contemporary society, with a focus on American religious movements that take issues such as ecojustice, sustainable farming practices, and responsible consumption seriously or are defined by them. Classic religious texts, particularly of the biblical tradition, will be studied when relevant, as will archaeological and ethnographic studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1519 - RELIGION, NATURE AND ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
When is religion good for the environment? When is it not? In this course, students will become acquainted with how religious traditions throughout the world have addressed specific ecological problems. They will explore ways in which religious institutions are an important organizational hub in struggles for environmental justice. They will compare the structural features shared by environmentalism and religiosity, both of which are interested in making meaning of the world by appealing to an ultimate authority, such as God or Nature; and in forming identities and building communities by promoting guidelines, norms, and ritualized behaviors. The very construction of Nature as a concept, and its reverence in the context of the sustainability movement, can be informed by theoretical discourse from the field of Religious Studies. After a survey of approaches to the natural world in major religious traditions, students will focus on themes such as garden spiritualties, gendered Nature reverence, and eco-justice. They will also acquire the skills to assess the scripturally inspired indifference-or even antagonism-to environmental science, and the long shadow it has cast on the global economy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1520 - BUDDHISM ALONG THE SILK ROAD

Minimum Credits: 3
Maximum Credits: 3
This class serves as an introduction to Buddhism from its origins through the seventh century CE as it moved along the Silk Road, the ancient EurAsian trading network that is considered one of the earliest and most important super highways of trade and culture. Concomitantly, it serves as an introduction to the silk road as the scenario for contact and exchange. The emphasis is on religious praxis, the actors and places that transformed Buddhism and were transformed by it. We will examine archaeological remains and art and discuss how they complement or sometimes contradict textually-based historical narratives. Through the examination of four case studies we will discuss questions related to religious interaction as embodied in material culture and analyze it in context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1540 - SAINTS EAST AND WEST

Minimum Credits: 3
Maximum Credits: 3
A Russian monk once observed that "each saint is a unique event." Indeed, in various religious traditions we encounter men and women who are recognized and venerated as particularly holy and unique witnesses to the divine. Just as each saint is unique within his or her tradition so is each tradition of saints unique in its articulation and expression of the overall religious culture. By looking cross-culturally at the materials on saints selected for this course and discussing (problematizing) the notion of sainthood itself, we examine religious themes, ideas and symbols found in

them. These diverse writings are often marked by a very personal tone, a deeply felt relation with the divine (sometimes reflecting a saint), inner struggles, sometimes his/her mystical experience of union), but also by pleas and calls for social and/or religious reforms. Our examples of devotional literature include Hindu, Muslim, and Christian sources, medieval as well as modern. Even though originating in specific religious contexts, many of these narratives raise issues which have wider human appeal and hence relevance for us today, too.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1545 - MYSTICISM IN ASIA

Minimum Credits: 3
Maximum Credits: 3
Mysticism, understood as a living experience of theological doctrines, constitutes an unexpected point of convergence between such different religious traditions as Hinduism and Eastern Orthodox Christianity. In this course we look into how this spiritual kinship is forged from distinct practices in India and in the traditions of eastern Christianity, by examining the selected mystical writings of both religious traditions. The course is structured around three central themes: 1) God as Mystery: negative theology (Hindu and Orthodox ways of unknowing the divine). 2) God as Person: the Hindu notion of avatar and Orthodox understanding of incarnation, and 3) God as Prayer: two selected methods of contemplation (Hindu yoga and Orthodox hesychast prayer). The course is based largely on reading and discussion of primary sources (in English translation) supplemented with selected secondary sources to help enhance students' understanding of the comparative method, on the one hand, and symbolic, often enigmatic and sometimes "upside-down" language of the mystical texts, on the other.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1550 - EAST ASIAN BUDDHISM

Minimum Credits: 3
Maximum Credits: 3
The transmission of Buddhism to East Asia was a momentous development in the history of world cultures and religions. Not only did it precipitate major changes in the cultures of China, Korea and Japan, it also was attended by transformations within Buddhism itself. Beginning with an introduction to the basic concepts of Buddhism, this course examines the major doctrinal, meditative, devotional, and institutional traditions and themes within Chinese and Japanese Buddhism in historical perspective. Particular attention is paid to the problems of transmission of thought and practices from one culture to another and to the ways in which Buddhism changed to meet those challenges and make itself relevant to the members of East Asian societies. We strive to develop an awareness of how Chinese and Japanese Buddhism interacted with and helped to shape East Asian history as well as to cultivate sensitivity to and appreciation of East Asian Buddhism as a contribution to our understanding of the human experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1552 - BUDDHIST MEDITATIVE TRADITIONS

Minimum Credits: 3
Maximum Credits: 3
Buddhist meditation is perhaps the best known of all Buddhist practices particularly in Western countries. In both Asia and the West, it has been popularized in recent times as a technique that can be used for such secular purposes as reducing stress and managing eating disorders. But what is Buddhist meditation? How it is practiced in its traditional contexts? What are the doctrinal foundations of meditation practices? What are the traditional purposes of practicing Buddhist meditation? What are the various types of meditation explained in Buddhist texts? How this practice evolved over time in different geographical regions in Asia? What are the roles of Buddhist or state institutions in shaping meditation practices? Focusing on these questions, this course examines the breath of Buddhist meditation practices and their historical evolution and transmission in Asian Buddhist countries. The course covers the role of meditation in early Indian Buddhism, the development of different types of meditation in Theravadan Buddhist countries, the emergence of the Chan school of meditation in China and its transmission to Japan (Zen), the appropriation of tantra to Buddhist practices in Tibetan Buddhism, and the modernization of Buddhist meditational practices during the colonial period. The course is taught using classical Buddhist texts and meditational manuals in translation, secondary studies, testimonials and films. In the process, we expect to enhance our familiarity with religious practices and our understanding of the human experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1554 - DEATH AND BEYOND IN BUDDHIST CULTURES

Minimum Credits: 3
Maximum Credits: 3
Death and beyond in Buddhist cultures mortality is the human condition. This seminar focuses on the philosophical discourse, beliefs and practices relating to death, dying and the afterlife in Buddhist cultures, both traditionally and in modern times. We explore Buddhist cosmology, karmic causality, death tales, postmortem journeys, ancestor rites, mortuary practices and ghost placation. Through primary texts in translation, secondary scholarship, discussion and film, we see how dealing with death tells us as much about life as it does about what lies beyond.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1558 - BUDDHISM AND PSYCHOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is divided into four thematic parts. The first part introduces basic knowledge on Buddhism. It then shows how the encounter between Buddhism and psychology has occurred in the wider context of Buddhist modernism, which has involved attempts by Buddhist reformers, psychologists, and neuroscientists to demythologize Buddhism to show how it can be understood as complementing modern empirical science. Part two offers concrete examples of Buddhist modernism by illustrating how Buddhist contemplative practices and doctrines such as sati have been reinterpreted and reformulated in modern psychology. Part three examines how a Japanese Zen practitioner's presentation of Zen compares with psychotherapeutic perspectives on it. Finally, in part four, a Buddhist-inspired psychotherapy widely used in Japan is examined to show how the reformulation of Buddhism to achieve psychotherapeutic goals has occurred in modern times in East Asia, albeit in a way that is distinctive from Buddhist-inspired psychotherapeutic practices in the west.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1560 - RELIGION AND HEALING IN CHINA

Minimum Credits: 3
Maximum Credits: 3
This course examines the major traditions and themes that constitute religion in China. The origins and development of Confucianism, Daoism, Buddhism, popular and family religion, and religion and the state are presented within an overall historical framework. As China becomes more and more central to the world's modern commodity culture, some have predicted a decline in traditional religious values and practices. In fact, the reverse is true: from Taiwan and Hong Kong through mainland China, increasing prosperity is resulting in an increased "investment" in religion. In addition to the study of religious ideas, practices, and institutions in premodern China, the course ends by looking at contemporary beliefs and practices and issues of politics, class, and gender. Our purpose is to gain some exposure to Chinese religious thought and practice, to identify dominant themes underlying Chinese values and behavior, and to explore the syncretic nature of religion in China as each tradition finds expression in and comes to influence other aspects of Chinese religion and culture. In this way, we hope to come to understand the critical role played by the various traditions in the unfolding of Chinese history and in the formation of the Chinese view of the world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1561 - CHINESE THOUGHT

Minimum Credits: 3
Maximum Credits: 3
A survey of major themes in the intellectual history of China from ancient times to the twentieth century, with special attention to the traditions of political and ethical debate. Readings include key texts from the classical canon (e.g. analects, mencius, daodejing), medieval religious traditions (Daoism and Buddhism), and late-imperial metaphysics. The course will conclude with a survey of various attempts at inheriting and disinheriting the past intellectual tradition in the twentieth century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1570 - RELIGION IN JAPAN

Minimum Credits: 3
Maximum Credits: 3
This course serves as a historical, doctrinal and practical introduction to the major religious traditions of Japan both classical and modern-day.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1572 - POPULAR RELIGION IN CHANGING JAPAN

Minimum Credits: 3
Maximum Credits: 3
This seminar, through a thematic treatment of popular and civil religion, informed by religious and cultural history, looks at the process through which religion participates in shaping and reshaping worldviews, behaviors, and practices in modern Japan.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1575 - LAW AND MEDICINE IN ASIAN RELIGIONS

Minimum Credits: 3
Maximum Credits: 3
This course introduces the intersections between law, religion, and medicine in East Asia. It will start with a theoretical orientation on the interaction between law and religion. In order to engage in these discussions in a global context, we will examine the manifestation of legal orientalism in China, Buddhist jurisdiction in Sri Lanka and Burma, religious governance in Tibet, as well as clerical immunity and sanctuary in medieval Europe. Next, students will learn to analyze cases illustrating the roles law has played in regulating religious and medical practices in East Asia. The cases we will examine span a long historical period ranging from the medieval to modern and the contemporary. For medicine and medical practices, the topics we will cover range from acupuncture, the use of wild animal in traditional medicine, the commercialization and regulation of caterpillar fungus, and the social, economic, and religious implications of the circulation of generic drug. To understand how law has shaped religious practices in East Asia, we will examine the infrastructure of legal practices and their applications in dealing with religious offenders. In particular, we will discuss underground jurisdiction, the history of forensic practices, criminal procedures, capital punishment, as well as prosecution of religious practitioners in the imperial and contemporary times. By the end of this course, students are expected to become competent in critically analyzing complex issues on law, medicine, and religion in East Asia for a more balanced understanding of these issues in the global context for personal and professional growth.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

RELGST 1610 - MYTH, SYMBOL AND RITUAL

Minimum Credits: 3
Maximum Credits: 3
Are myths only a thing of the past, or are there contemporary 'myths' that we live by? To what extent are football games and shopping trips "rituals"? How do plants and animals, the cosmos and the human body, or things we associate with bad luck or good health, function as symbols? This course offers a look at how myths, symbols and rituals, in their traditional and contemporary garb, constantly renew themselves as a way for different cultures to give significance to human life. By understanding these three basic forms of human expression we can gain understanding of a wide range of social and religious phenomena. We start with comparative exploration of myths on the origin of the world, humanity, and the gods, and with such rituals as rites of passage, festivals, and pilgrimages, as well as the theories of these expressions and their significance. The course then moves to observations of and reflections on the role of myth, symbol, and ritual in contemporary life, and their relation to such forms of human expression as literature, art, film and our own dreams.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RELGST 1620 - WOMEN IN RELIGION

Minimum Credits: 3
Maximum Credits: 3
An examination of the place and role of women in Western religious traditions.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

RELGST 1642 - CHRISTIAN-MUSLIM RELATIONS

Minimum Credits: 3
Maximum Credits: 3
This course surveys the historical interaction between Christian and Muslim communities over the past 1400 years and focuses on the art of polemic as an important tool in the human construction of religious concepts. We will begin by understanding the evolution of Islam in the seventh century, and continue with the encounters between Islam and the byzantine empire, and the medieval caliphate's encounters with the West, including the crusades. We will then consider specific elements of the interaction between Christian and Muslim communities, drawing from a variety of Muslim communities in Europe and the United States.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1644 - CHRISTIAN MUSLIMS JEWS IN THE MIDDLE AGES: CONNECTION & CONFLICT

Minimum Credits: 3
Maximum Credits: 3
Was the world of Europe and the Middle East before the Enlightenment a period of unending religious conflict and intolerance? Were Jews the victims of severe persecution and violence everywhere during this period? Did Christians and Muslims engage in unceasing religious wars? The answer to all three of these questions is no. While the Middle Ages were a period of conflict and competition between the three major western religious groups, they were also a time of coexistence and cooperation. This class shifts from extreme dichotomies and simplistic stereotypes to deeply examine the period in all of its complexity: what were the theological, political, and legal contexts in which Christians, Muslims, and Jews interacted in both Christian Europe and the Muslim world? How did these deeply religious societies organize themselves to tolerate the religious "Other"? When and why did toleration break down and lead to expulsion, forced conversion, or violence? What kinds of cross-cultural exchanges and cooperation take place in economic, cultural, intellectual, and social life? We will also look at new ideas of toleration (and intolerance) that emerged at the end of the Middle Ages and examine aspects of inter-religious encounters and dialogues today. We will discuss not only the significance of Jewish-Christian-Muslim interactions in the Middle Ages but also assess these encounters as a case study in the broader history of religious diversity, pluralism, and conflict.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

RELGST 1645 - THE HISTORICAL JESUS

Minimum Credits: 3
Maximum Credits: 3
This course examines the complex and often polarized relationship between Jesus and Jews (and by extension, Christianity and Judaism) in both ancient and modern contexts. Students will interact with a wide range of primary sources centered on the figure of Jesus `from the Christian gospels through rabbinic discussions of Jesus to modern portrayals of Jesus and the Jews in cinema and scholarship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1650 - APPROACHES TO ANTISEMITISM

Minimum Credits: 3
Maximum Credits: 3
We survey historical, sociological, psychological, religious and political approaches to expressions of antisemitism as we study scholarly treatment of the phenomenon in the 20th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1665 - ANTHROPOLOGY OF RELIGION

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the anthropological study of religion. While it is generally assumed that religious practice exists in nearly every human society, what 'religion' is, how it should be defined, and whether there is a basic common denominator that is universal is a matter of debate among anthropologists. We will explore different theoretical and conceptual approaches that have informed anthropological perspectives in the study of religion, while also investigating anthropological studies of ritual, sacrifice, magic, healing, and death. Furthermore, we examine how these studies have discussed the relation of religion to questions around kinship, gender and sexuality, and social justice. By covering such a range of topics, this class enables students to learn how religion is understood, experienced and expressed across divergent sociocultural contexts, in the past and in the present.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1680 - HISTORY AND MEMORY IN THE JEWISH TRADITION

Minimum Credits: 3
Maximum Credits: 3
Students will be introduced to the manner in which historians have studied and understood the Jewish experience from antiquity through the modern age. The role of historical study in the formation of Jewish identity will be especially highlighted.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1681 - INVENTING ISRAEL: ZIONISM, ANTI-ZIONISM, AND POST-ZIONISM

Minimum Credits: 3
Maximum Credits: 3
In this course, we will study the origins and development of Zionism as a form of modern Jewish nationalism, the emergence of different Zionist ideological streams, and non-Zionist, anti-Zionist, and post-Zionist views of Jews and non-Jews. We will also explore Zionism as a case study of relations of religion and nationalism in modernity. This course is an opportunity to carefully study and to contextualize writings and ideas of religious and political thinkers that have been both influential and controversial. The goal is to offer students historical background to ideas and issues of contemporary importance as well as skills in interpretation and contextualization of complex texts that continue to inform public discourse.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

RELGST 1720 - RELIGION AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
Religion is thought, felt, and acted out in social and cultural contexts. The relationship between religion and culture is the focus of the course. The objectives are to understand religion wherever and whenever found and to understand the anthropological approach in the cross-cultural study of religion. Religious belief, ritual, myth, dogma and religious specialists in industrial and non-industrial societies are compared.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Asian Studies, Global Studies

RELGST 1722 - HEALING, SHAMANISM, AND SPIRITUAL POSSESSION

Minimum Credits: 3
Maximum Credits: 3
Anthropological approaches to the study of religion have classically defined shamanism as a spiritual practice opposed to spirit possession. While shamanism is centered on the claims of individuals to exit their bodies and venture into other realms of consciousness and reality, spirit possession would chart the opposite movement, where other spiritual beings take over or are invited into a human host. Both of these activities however, involve fusing or blurring the normal states and boundaries of body, personhood and consciousness, in interaction with other supernatural beings. Both are also routine religious experiences and practices in many parts of the world, past and present. Notwithstanding, these phenomena have been mistakenly associated with mental disorder by sociocultural anthropologists and psychologists in the past. At this point, however, the argument that

shamanism and spiritual possession are not a function of mental illness has prevailed. Today, there is no doubt that the impact of these practices in the social life of its practitioners is multiple and complex. Despite that fact, this course will focus on the therapeutic aspects of these traditions. Far from being "primitive" or purely "exotic" phenomena, we will explore how these living practices relate to great civilizations, as part of regional, national, and global ideologies of religion and culture. More precisely, we will examine the role of traditional medicine based on cross-cultural ethnographies. We will explore, for example, how indigenous groups throughout the Americas diagnose and treat folk illness and Western defined diseases with variety of methods. Culturally defined illness such as soul loss, evil eye, witchcraft and other psychosomatic afflictions will be explored through lecture, readings and films. We will examine the use of art, music and ritual as well as psychotropic plants as part of the very heart of many indigenous cultural traditions. That said, this course will also provide an opportunity to understand why these practices have been reawakened not only by modern anthropological inquiry, but also by multidisciplinary interest in states of consciousness and mechanisms of therapy, and by popular interest in alternative forms of spirituality.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1725 - DEATH AND HEALTHCARE PROFESSIONS

Minimum Credits: 3
Maximum Credits: 3
The American culture of the 20th and 21st centuries has been called, not death-defying, but death-denying. It is often said that America is the only place in the world that treats death as optional. Once upon a time, we couldn't have open, public conversations about breast cancer, because the word could not be uttered aloud. In many places, it is just as hard today to have an open, public conversation about death and dying. This phenomenon is not just a social more; it affects the practice of many professions and entire segments of our economy and society. This course will explore our individual and cultural reactions to mortality, the ways in which dying in today's America is different from dying throughout history or elsewhere in the world, and the responses of a variety of professions, both within the field of healthcare and beyond, to their encounters with people in the various stages of dying. Students will be asked, at turns, to be scientific, philosophical, clinical, analytical, and emotional in encountering the concepts and material presented here. This should be a true interdisciplinary experience.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

RELGST 1726 - HEALING AND HUMANITY

Minimum Credits: 3
Maximum Credits: 3
Medical ethics courses (such as Pitt's "Morality and Medicine") focus on critical analysis of societal questions such as abortion, euthanasia, genetic engineering, allocation of scarce resources such as organs for transplant, and the opioid crisis. There is no doubt these questions need to be addressed. However, I contend there is a "micro-ethics" of medicine - thousands of individual interactions between healers (meaning any persons involved in delivering some part of a person's healthcare) and the people they care for. Their words, actions, demeanor, and the built environment in which they work can all contribute to, or detract from, the ultimate well-being and humanity of the person receiving the care. In this course, we will discuss these "micro-ethics" in detail, beginning with the religious and philosophical underpinnings of what it means to be well and what it means to be human. We will then look at how two individuals in relationship can work towards healing through listening, questioning, speaking, and communicating non-verbally. We will examine how placing those individuals in the context of a system of overlapping relationships affects their interaction. We will assess the impact of different factors about the healer, the person seeking healing, and their shared environment that detract from their relationship. Finally, we will propose and critique ways of strengthening that relationship both within the existing environment of the US healthcare system in 20__ and by altering that environment.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

RELGST 1726 - HEALING AND HUMANITY

Minimum Credits: 3
Maximum Credits: 3
Medical ethics courses (such as Pitt's "Morality and Medicine") focus on critical analysis of societal questions such as abortion, euthanasia, genetic engineering, allocation of scarce resources such as organs for transplant, and the opioid crisis. There is no doubt these questions need to be addressed. However, I contend there is a "micro-ethics" of medicine â?? thousands of individual interactions between healers (meaning any persons involved in delivering some part of a person's healthcare) and the people they care for. Their words, actions, demeanor, and the built environment in which they work can all contribute to, or detract from, the ultimate well-being and humanity of the person receiving the care. In this course, we will discuss these "micro-ethics" in detail, beginning with the religious and philosophical underpinnings of what it means to be well and what it means to be human. We will then look at how two individuals in relationship can work towards healing through listening, questioning, speaking, and communicating non-verbally. We will examine how placing those individuals in the context of a system of overlapping relationships affects their interaction. We will assess the impact of different factors about the healer, the person seeking healing, and their shared environment that detract from their relationship. Finally, we will propose and critique ways of strengthening that relationship both within the existing environment of the US healthcare system in 20__ and by altering that environment.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

RELGST 1762 - THE GUIDE OF THE PERPLEXED

Minimum Credits: 3
Maximum Credits: 3
This course will study the guide of the perplexed by the great Jewish thinker Moses Maimonides (1138-1204). It will give special attention to the religious language and arguments for the existence of god in the text, and to Maimonides teachings on religious experience, revelation and his views on human perfection and immortality.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Phil. Think or Ethics General Ed. Requirement, SCI Polymathic Contexts: Ethical/Policy GE. Req.

RELGST 1780 - COMPUTATIONAL METHODS IN THE HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the use of computational modeling and programming to conduct text-based research in the humanities. Course goals include 1) learning how to identify research questions in the humanities that are amenable to computational analysis and processing and 2) designing and implementing xml-based computational systems to explore those questions. No prior programming experience or knowledge of foreign languages required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

RELGST 1800 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course aims to create a sustained and reciprocal dialogue between bible and film, exploring the intersection of the biblical text with modern cinema. In other words, we will use modern films to facilitate discussion about various dimensions, issues, and themes encoded in select biblical texts and traditions (Jewish and Christian), and conversely we will use the biblical traditions to probe the religious, cultural, and ideological layers embedded within modern cinema. Movies examined in this course will include both overt treatments of the biblical text, in particular, several very different treatments of the figure of Jesus and subtle, indirect engagements with various biblical themes and teachings.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

RELGST 1802 - RELIGYINZ: RESEARCHING RELIGION IN PITTSBURGH

Minimum Credits: 3
Maximum Credits: 3
In this course, students will get a taste (sometimes literally) of lived, religious diversity in the city of Pittsburgh. In this experiential course, students will have a chance to visit some of the sites that Pittsburghers have made sacred, and learn more about the lives of religious Pittsburghers, past and present. In the process, students will learn about scholarly concepts like "urban religion," "lived religion," and "material religion," and how to apply those ideas to the sacred spaces, objects, foods, and rituals of Pittsburgh.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RELGST 1803 - CAPSTONE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
The senior thesis capstone seminar required of all graduating majors is offered annually in the Fall Term and is taught by rotating faculty with a different theme each year. Students research, write, and present a project of their own choosing based on the annual theme under the supervision of the seminar instructor and a research advisor from among our faculty. Permission of the DUS is required.
Academic Career: Undergraduate

Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

RELGST 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
A variety of projects may be undertaken by students under the close supervision of a senior faculty member.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

RELGST 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 4
A variety of individual reading and research projects may be undertaken by students under the close supervision of a senior faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

RELGST 1902 - DIRECTED STUDY-UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 4
Students may undertake a variety of individual reading or research projects under the close supervision of a senior faculty member. Regular meetings are required.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

RELGST 1903 - DIRECTED RESEARCH-UNDERGRADUATE

Minimum Credits: 1
Maximum Credits: 4
Majors may take on a research project under the direction of a department faculty member. Permission of the DUS is required.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Requirement Course

RELGST 1904 - UNDERGRADUATE RESEARCH ASSISTANT

Minimum Credits: 1
Maximum Credits: 4
Students participate in a faculty member's current research project as a research assistant under the guidance of the faculty member. The student is given training in research methods. 1-4 credits available depending on number of hours per week worked. Credits earned will be S/N only. Permission of the department (DUS) and the faculty member is required.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

RELGST 1905 - UNDERGRADUATE TEACHING ASSISTANT

Minimum Credits: 1
Maximum Credits: 4

Students serve as an undergraduate teaching assistant in religious studies courses under the supervision of a faculty member. 1-4 credits available depending on number of hours per week worked. Credits earned will be s/n only. Permission of the department (DUS) and the faculty member is required.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

ROTC Program

AFROTC 0001 - HERITAGE AND VALUES OF UNITED STATES AIR FORCE 1

Minimum Credits: 1
Maximum Credits: 1
AS 100, "Heritage and Values of the United States Air Force," is a survey course designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the air force.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

AFROTC 0002 - HERITAGE AND VALUE OF US AIR FORCE 2

Minimum Credits: 1
Maximum Credits: 1
This course is the second of a two semester sequence dealing with the U.S. Air force in the contemporary world. The sequence focuses on the basic characteristics of air doctrine; strategic offensive and defense, general purpose, and aerospace support forces; and officer ship.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: Fr or So

AFROTC 0003 - EVOLUTION OF AIR AND SPACE POWER

Minimum Credits: 1
Maximum Credits: 1
As200 course designed to examine general aspects of air & space power, through historical perspective. Course covers time period from the first balloons & dirigibles to space age global positioning systems of the Persian Gulf War. Historical examples provided to extrapolate development of a capabilities & missions to demonstrate evolution of what has become today's USAF Air & Space Power. Course provides cadets with knowledge level understanding of air & space power from an institutional doctrinal & historical perspective. LLAB mandatory for AFROTC Cadets & complements course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

AFROTC 0004 - TEAM AND LEADERSHIP 2

Minimum Credits: 1
Maximum Credits: 1
This course is the second of a two semester sequence which surveys the history of air power from balloons and dirigibles through the jet age. It focuses on factors contributing to change in the nature of military conflict; the development of air power and the evolution of air power doctrine and concepts; and the role of technology in the growth of air power.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: So

AFROTC 0005 - FRESHMAN LEADERSHIP LAB

Minimum Credits: 0
Maximum Credits: 0
The as100 and as200 leadership laboratory courses (LLABS) include a study of air force customs and courtesies, drills and ceremonies, and military commands. The LLAB also includes studying the environment of an air force officer and learning about areas of opportunity available to

commissioned officers.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis
Course Requirements: LVL: Fr

AFROTC 0006 - SOPHOMORE LEADERSHIP LAB

Minimum Credits: 0
Maximum Credits: 0
The as100 and as200 leadership laboratory courses (LLAB) include a study of air force customs and courtesies, drill and ceremonies, and military commands. The LLAB also includes studying the environment of an air force officer and learning about areas of opportunity available to commissioned officers.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis
Course Requirements: LVL: So

AFROTC 0007 - TEAM AND LEADERSHIP 1

Minimum Credits: 1
Maximum Credits: 1
Focuses on laying the foundation for teams and leadership. The topics include skills that will allow cadets to improve their leadership on a personal level and within a team. The courses will prepare cadets for their field training experience where they will be able to put the concepts learned into practice. The purpose is to instill a leadership mindset and to motivate sophomore students to transition from AFROTC cadet to AFROTC officer candidate.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

AFROTC 1005 - JUNIOR LEADERSHIP LAB

Minimum Credits: 0
Maximum Credits: 0
The as300 and as400 LLABS consist of activities classified as leadership and management experiences. They involve the planning and controlling of military activities of the cadet corps, and the preparation of briefings and other oral and written communications. LLABS also include interviews, guidance, and information which will increase the understanding, motivation, and performance of other cadets.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis
Course Requirements: LVL: Jr

AFROTC 1006 - SENIOR LEADERSHIP LAB

Minimum Credits: 0
Maximum Credits: 0
The as300 and as400 LLABS consist of activities classified as leadership and management experiences. They involve the planning and controlling of military activities of the cadet corps, and the preparation of briefings and other oral and written communications. LLABS also include interviews, guidance, and information which will increase the understanding, motivation, and performance of other cadets.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: H/S/U Basis
Course Requirements: LVL: Sr

AFROTC 1013 - LEADING PEOPLE AND EFFECTIVE COMMUNICATION 1

Minimum Credits: 3
Maximum Credits: 3
AS 300, "LEADING PEOPLE AND EFFECTIVE COMMUNICATION," teaches cadets advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills and communication. Cadets have an opportunity to try out these leadership and management techniques in a supervised environment as juniors and seniors.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

AFROTC 1014 - LEADING AND COMMUNICATIONS 2

Minimum Credits: 3
Maximum Credits: 3
This is the second of a two-semester integrated management course emphasizing the concepts and skills required by the successful manager and leader. It also includes instruction on communication skills and military ethics. The curriculum encompasses individual motivational and behavioral processes, leadership, communication, and group dynamics within the context of a military organization.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: LVL: Jr

AFROTC 1015 - NATIONAL SECURITY AFFAIRS/PREPARATION FOR ACTIVE DUTY

Minimum Credits: 3
Maximum Credits: 3
AS 400, "NATIONAL SECURITY AFFAIRS/PREPARATION FOR ACTIVE DUTY," is designed for college seniors and gives them the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession and requires a measure of sophistication commensurate with the senior college level. The final semester provides information that will prepare the cadets for active duty.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

AFROTC 1016 - NATIONAL SECURITY FORCES

Minimum Credits: 3
Maximum Credits: 3
This course is the second of two semester sequence surveying key issues of U.S. National security. The second semester focuses on the soviet union and major regional issues of importance to U.S. National interests. It also includes instruction on the military as a profession, Officership, and the military justice system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 0011 - INTRODUCTION TO THE ARMY

Minimum Credits: 1
Maximum Credits: 1
MILS 0011 is offered during the fall term. This freshman course is an introduction to army ROTC. Course instruction includes survival techniques, first aid, wear of the military uniform and organization, role and branches of the U.S. army.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 0012 - ADAPTIVE LEADERSHIP

Minimum Credits: 1
Maximum Credits: 1
MILS 0012 is offered during the spring term. This freshman course is an introduction to army ROTC. Course instruction includes leadership and management, drill and ceremonies, land navigation, basic, pistol/rifle marksmanship and organization and role of the U.S. army reserve and national guard units.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 0021 - LEADERSHIP & DECISION MAKING

Minimum Credits: 1
Maximum Credits: 1
MILS 0021 is offered during the fall term. This sophomore course is an introduction to army ROTC. Course instruction includes the total army concept, army rank and structure, leadership and management, land navigation and drill and ceremonies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 0022 - ARMY TEAM DEVELOPMENT

Minimum Credits: 1
Maximum Credits: 1
MILS 0022 is offered during the spring term. This sophomore course is an introduction to army ROTC. Course instruction includes group communication, decision making and problem solving techniques, military history, leadership and management and land navigation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 1031 - TRAINING MANAGEMENT

Minimum Credits: 1
Maximum Credits: 1
MILS 1031 is offered during the fall term. This junior course prepares the army ROTC student for commissioning into the U.S. army as a second lieutenant. Course instruction is coupled with practical exercises in tactical and technical military subjects with particular emphasis on leadership development, problem solving and decision making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 1032 - APPLIED LEADERSHIP

Minimum Credits: 1
Maximum Credits: 1
MILS 1032 is offered during the spring term. This junior course prepares the army ROTC student for commissioning into the U.S. army as a second lieutenant. Course instruction is coupled with practical exercises in tactical and technical military subjects with particular emphasis on leadership development, problem solving and decision making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 1041 - THE ARMY OFFICER

Minimum Credits: 1
Maximum Credits: 1
MILS 1041 is offered during the fall term. This senior course continues to prepare the army ROTC student for commissioning into the U.S. army as a second lieutenant. Course instruction emphasizes leadership, army operations and procedures.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

MILS 1042 - COMPANY GRADE LEADERSHIP

Minimum Credits: 1
Maximum Credits: 1
MILS 1042 is offered during the spring term. This senior course continues to prepare the army ROTC student for commissioning into the U.S. army as a second lieutenant. Course instruction emphasizes military justice and professional ethics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Russian

RUSS 0010 - ELEMENTARY RUSSIAN 1

Minimum Credits: 5
Maximum Credits: 5
A traditional four-skills course, this course meets with the main lecturer and with the drill instructor. The student acquires basic skills in Russian pronunciation, speaking, listening, and writing, commensurate with the grammatical topics covered. During the first semester these topics include, among others; the present and past tenses, the nominative, prepositional, and accusative cases. The course aims to go beyond the confines of the textbook readings and conversations and apply grammar and vocabulary to practical situations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

RUSS 0090 - RUSSIAN FAIRY TALES

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to Russian folklore through the oral genre of fairy tales so as to acquaint them with popular structures of thought underpinning modes of Russian behavior. A significant component of the course will consist of visual and audio representations of scenes from fairy tales.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Children's Literature, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

RUSS 0091 - READING RUSSIAN FAIRY TALES IN RUSSIAN

Minimum Credits: 1
Maximum Credits: 1
This course is a one-credit add-on module for students who are taking (or have taken) Russian fairy tales (RUSS 0090) and who would like to read selected tales and other texts in Russian.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Attributes: Russian & East European Studies

RUSS 0092 - HONORS RUSSIAN FAIRY TALES

Minimum Credits: 1
Maximum Credits: 1
This course is a 1-credit honors (UHC) trailer for RUSS 0090 (Russian Fairy Tales), and is designed for students who would like to supplement the survey features of the regular fairy-tale course with an honors-level research-focused experience. Students enrolled in the trailer must either be enrolled simultaneously in RUSS 0090 or have completed it in a prior semester. The trailer course meets once a week, for which students will prepare, for discussion, additional readings or analyses of Russian fairy tale texts. As a focal project for the 1-credit trailer, students will produce, by the end of the semester, a research or analytical paper about Russian fairy tales that builds on the theoretical and critical methods introduced in RUSS 0090 and explored in greater detail in the trailer course. Evaluation will be based on prepared participation in the weekly meetings and on the final paper.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ or COREQ: RUSS 0090. (Students enrolled in the honors trailer must either be enrolled simultaneously in Russ 0090 or have completed it in a prior semester.)

RUSS 0101 - ELEMENTARY RUSSIAN 1

Minimum Credits: 4
Maximum Credits: 4
A traditional four-skills course, this course meets with the main lecturer and with the drill instructor. The student acquires basic skills in Russian pronunciation, speaking, listening, and writing, commensurate with the grammatical topics covered. During the first semester these topics include, among others; the present and past tenses, the nominative, prepositional, and accusative cases. The course aims to go beyond the confines of the textbook readings and conversations and apply grammar and vocabulary to practical situations.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

RUSS 0102 - ELEMENTARY RUSSIAN 2

Minimum Credits: 4
Maximum Credits: 4
The continuation of Russian 0010, this course focuses on aural comprehension of Russian as a means for developing spoken competence, the aim being to sharpen the student's spoken proficiency. Attention is paid to the function of word order and intonation. Grammatical topics covered include the genitive and instrumental cases and verbal aspect. Vocabulary and phraseology are learned in both grammatical and cultural context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: RUSS 0010 or RUSS 0101

RUSS 0103 - INTERMEDIATE RUSSIAN 1

Minimum Credits: 4
Maximum Credits: 4
The continuation of Russian 0020, this course completes the introduction to basic Russian grammatical structures. The dative case, participles and gerunds, verbs of motion, and questions of verbal government are dealt with systematically. Extra-textbook material introduces the student to samples of unedited real-language texts. In developing spoken language ability, topics related to cross-cultural comparison receive prominence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Second Language General Ed. Requirement

RUSS 0104 - INTERMEDIATE RUSSIAN 2

Minimum Credits: 4
Maximum Credits: 4
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0110 - RUSSIAN CONVERSATION PRACTICE

Minimum Credits: 1
Maximum Credits: 1
This course has an emphasis on communicative proficiency and offers first-year and second-year Russian students diverse opportunities to practice and improve their Russian listening and speaking skills. Students will enrich their vocabulary, practice and act out dialogues, participate in discussions and situations that simulate everyday Russian life, and improve their Russian pronunciation and intonation. A variety of language learning activities in the three modalities--speaking, listening, and reading--will allow students to develop skills in order to communicate meaningfully and effectively in Russian for real-life purposes.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

RUSS 0210 - INTENSIVE BEGINNING RUSSIAN

Minimum Credits: 8
Maximum Credits: 8
A thorough introduction to Russian pronunciation, grammar, and syntax. A full, rigorous treatment of the sound and writing systems is followed by the basic categories of the noun and verb: gender, number, case, tense, and aspect. Nominative, accusative, prepositional, and dative case of nouns and adjectives, present and past perfective and imperfective verbs are presented. Emphasis is placed on communicative competence -- active use of new structures in reading, dialogues, free conversation, listening comprehension.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

RUSS 0211 - BEGINNING INTENSIVE RUSSIAN PITT/MOSCOW

Minimum Credits: 10
Maximum Credits: 10
This is a first-year Russian course, equivalent to RUSS 0010 and 0020 and RUSS 0210. Four weeks on campus and five weeks in Moscow at Moscow state linguistic university. Part of the Russian summer institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0220 - INTENSIVE INTERMEDIATE RUSSIAN

Minimum Credits: 8
Maximum Credits: 8
A rigorous presentation of the basic uses of all nominal and verbal categories: declensions of nouns and adjectives in all cases, singular and plural, deepening of the knowledge of aspect uses, verbs of motion, conditional sentences, imperatives, indefinite pronouns, comparison of adjectives, time expressions, prepositional phrases. Attention paid to phraseology on both oral and written levels, introduction to participles and verbal adverbs. Great emphasis is placed on developing fluency in conversation.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0221 - INTERMEDIATE INTENSIVE RUSSIAN PITT/MOSCOW

Minimum Credits: 10
Maximum Credits: 10
This is a second-year Russian course, equivalent to RUSS 0030 and 0040 and RUSS 0220. Four weeks on campus and five weeks in Moscow at Moscow state linguistic university. Part of the Russian summer institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0226 - INTERMEDIATE INTENSIVE RUSSIAN ABROAD

Minimum Credits: 8
Maximum Credits: 8
This is a course in second-year intermediate intensive Russian held abroad for eight weeks during summer. This course is eight weeks in duration.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Study Abroad

RUSS 0230 - INTENSIVE ADVANCED RUSSIAN

Minimum Credits: 8
Maximum Credits: 8
This intensive course has two components: the first, conversation, will consist in the preparation of dialogues, debates, and in-class discussions in Russian. The second, grammar, will be based on an accompanying grammar text and on short compositions that will draw on material covered in the text. The course objectives are: to develop a familiarity with the more subtle and complex aspects of Russian grammar; to develop an active vocabulary in practical, everyday topics, suited for travel to the soviet union; to refine composition skills.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0231 - ADVANCED INTENSIVE RUSSIAN PITT/MOSCOW

Minimum Credits: 10
Maximum Credits: 10
This is an advanced-level (third-year) Russian language course, equivalent to RUSS 0400 and 0410 and RUSS 0230. Four weeks on campus and five weeks in Moscow at Moscow state linguistic university. Part of the Russian summer institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0236 - ROTC ADVANCED RUSSIAN ABROAD

Minimum Credits: 8
Maximum Credits: 8
This study abroad course at the advanced level of Russian, designed for ROTC project go scholarship recipients, develops an active vocabulary and grammar in practical, everyday topics, improves writing and speaking skills, and enriches cultural competency. Students will participate in a combination of intensive language classes, lectures, and cultural excursions.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

RUSS 0240 - INTENSIVE FOURTH-YEAR RUSSIAN

Minimum Credits: 8
Maximum Credits: 8
This intensive course is a survey of 19th century Russian literature aimed at post-third year Russian students. The course will consist of lectures, readings, and discussions covering the major 19th century authors; also translation, grammar review and composition and conversation practice.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0241 - 4TH YEAR INTENSIVE RUSSIAN PITT/MOSCOW

Minimum Credits: 10
Maximum Credits: 10
This is a fourth-year Russian language course requiring an advanced knowledge of the Russian language. Four weeks on campus and five weeks in Moscow at Moscow state linguistic university. Part of the Russian summer institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

RUSS 0246 - ROTC 4TH YEAR RUSSIAN ABROAD

Minimum Credits: 8
Maximum Credits: 8
This study abroad course at the fourth-year level of Russian, designed for ROTC project go scholarship recipients, develops an active vocabulary and grammar in practical, everyday topics, improves writing and speaking skills at the super advanced level, and enriches cultural competency. Students will participate in a combination of intensive language classes, lectures, and cultural excursions.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

RUSS 0325 - THE SHORT STORY

Minimum Credits: 3
Maximum Credits: 3
This course will be devoted to reading short stories from 19th and 20th century Russian literature. The authors include 19th century masters Pushkin, Gogol, Dostoevsky, Tolstoy, and Chekhov--to 20th century favorites Babel, Zamyatin and Zoshchenko, right up to contemporary writers Solzhenitsyn, Shalamov, Petrusheuskaya, Tolstaya, and Tokareuy.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

RUSS 0400 - ADVANCED RUSSIAN 1

Minimum Credits: 3
Maximum Credits: 3
This three-credit course develops third-year students' reading, writing, and oral skills through grammar review and readings. Students will write compositions in Russian and will summarize and comment in Russian on their reading in addition to participating in grammar review exercises in class.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

RUSS 0410 - ADVANCED RUSSIAN 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of Advanced Russian 1, this three-credit course will focus on developing students' reading, writing, and oral skills through grammar review and readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

RUSS 0590 - FORMATIVE MASTERPIECES

Minimum Credits: 3
Maximum Credits: 3
This course will be devoted to reading formative literary masterpieces from the 19th century. The authors include Tolstoy, Dostoevsky and Chekhov and others such as Pushkin, Gogol, Turgenev and Ostrovsky.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

RUSS 0740 - EVENING RUSSIAN 4

Minimum Credits: 4
Maximum Credits: 4
This is a second-year, second-semester Russian course conducted in the evening for non-majors.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RUSS 0800 - MASTERPIECES 19TH CENTURY RUSSIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will focus on selected masterpieces of Russian literature of the nineteenth century. The chosen works will be studied and discussed for their intrinsic literary value and as examples of main literary trends. Readings will include short stories by Pushkin, Gogol, Leskov, and Chekov, as well as Gogol's novel "Dead Souls", Dostoevsky's "Crime and Punishment", and Tolstoy's "War and Peace".
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*

Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

RUSS 0810 - MASTERPIECES 20TH CENTURY RUSSIAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will focus on selected masterpieces of twentieth century Russian literature; particularly on four major authors; Bely (Petersburg), Pasternak (Dr. Zhivago), Babel (Red Cavalry), and Solzhenitsyn (Ivan Denisovich). Stories of more contemporary writers, including Rasputin, Bitov, Trifoniv, Iskandar, Sinyavsky, Shukshin, and Voinovich, will also be read. Emphasis is placed on the variety of prose narratives popular in the 20th century, and on the emergence of new problems and perspectives and their expression in the context of Soviet Russia.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Writing Requirement Course

RUSS 0811 - MADNESS AND MADMEN IN RUSS CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course explores the theme of madness in Russian literature from its medieval period through our days. The emphasis will be placed not only on literacy works, but also on painting, music, and cinema, as well as on nonfictional documents, such as Russian medical, judicial, political, and religious treatises and essays on madness. Reading assignments will draw from theoretical (Foucault), cultural history (Billington, Rzhevsky), and literary sources.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

RUSS 0850 - EARLY RUSSIAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to the development of Russian culture from 988 through 1825, including Russia's religious, artistic, and ideological writings. Readings will include the chronicles, vitae, apocrypha, epistolary polemics, secular tales, autobiography, and early prose fiction. Visual art and architecture of the Kievan, Novgorod, and Romanov periods of Russian history provide a larger artistic context for the literary works.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RUSS 0860 - MODERN RUSSIAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
From the reign of Nicholas I to the Gorbachev administration, Russian intellectual and artistic discourse has repeatedly returned to the question of Russia's relationship with the West. This issue will provide the focus for a cultural overview of the last two centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

RUSS 0870 - RUSSIAN FILM: EISENSTEIN AND COMPANY

Minimum Credits: 3
Maximum Credits: 3
The course presents the history of Russian and Soviet films, filmmaking, and the film industry from the coronation of Tsar Nicholas II to the death of Stalin.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, Film Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

RUSS 0871 - RUSSIAN FILM STALIN TO PUTIN

Minimum Credits: 3
Maximum Credits: 3
The course traces the history of Russo-Soviet cinema from the death of Stalin to the present. Particular attention is paid to the four major periods in Russo-Soviet history since the death of Stalin.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS The Arts General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Intensive Course (WRIT)

RUSS 1066 - FORBIDDEN LOVE ON PAGE AND SCREEN

Minimum Credits: 3
Maximum Credits: 3
This course examines the mythology of extramarital transgression. Our primary focus will fall on the screen adaptations of four nineteenth-century novels of adultery: The Scarlet Letter (1850), Madame Bovary (1857), Anna Karenina (1875-1877), and Effi Briest (1895). We will read and analyze graphic novels based on these literary sources. Integrated into the course will be the verbal and visual texts which will allow us to realize that the novels of adultery are on a par with their celluloid and graphic-novel (comics-format) versions constitute the multi-faceted construct resting on the adultery myth.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RUSS 1202 - DOSTOEVSKY: THE MAJOR NOVELS

Minimum Credits: 3
Maximum Credits: 3
A close contextual examination of Dostoevsky's major novels, beginning with "notes from underground": crime and punishment, the idiot, the devils, raw youth, and the brothers Karamazov. Each text will be analyzed in the context of the cultural and intellectual debates that accompanied its reception in imperial Russia and the Soviet Union. Secondary readings will include representative essays by the social critics, formalists, Marxists, and semioticians.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Russian & East European Studies

RUSS 1210 - MAN/SUPERMAN: REPRESENTATIONS SUPERIOR INDIVIDUALS IN LITERATURE, FILM, PHILOSOPHY, DRAMA, AND MUSIC

Minimum Credits: 3
Maximum Credits: 3
In 1866, in an apartment in St. Petersburg, Russia, Rodion Raskolnikov decides to rid the world of evil by murdering an old pawnbroker with an axe. This course examines literary, cinematic, dramatic, musical and philosophical responses to that murder, examining such questions as: what is a superior individual? What is the role of motivation in action? Must all action have an underlying motivation or is gratuitous action possible? What is the role of confession and legacy in the actions of the superman and his acts of will? What are the obligations of the superman to society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

RUSS 1307 - CHEKHOV

Minimum Credits: 3
Maximum Credits: 3
The three major aspects of Chekhov's art will be examined -- the humoristic stories and sketches of his youth, the typical Chekhovian story of his middle period, and his plays. Chekhov's place in the context of Russian literature and his importance as an original and modern playwright, as well as his lasting contribution to the understanding of modern characters and situations will be assessed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Russian & East European Studies

RUSS 1310 - NABOKOV

Minimum Credits: 3
Maximum Credits: 3
A survey of the major writings of Vladimir Nabokov, including novels and short stories from both the Russian and American periods. Discussion topics will include: the semiotics of life-creation, art as perversity, author-hero dynamics, exile and nostalgia, bilingualism and translation, the violence of linguistic play, the manipulation of narrative desire; modernism and postmodernism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Humanistic GE. Req.

RUSS 1400 - MORPHOLOGY AND STRUCTURE OF RUSSIAN

Minimum Credits: 3
Maximum Credits: 3
This course reviews Russian nominal, adjectival, and verbal morphology from a structural linguistic perspective. In flectional morphology is viewed against the background of the Russian sound system -- its morphology, and phonemic and phonetic realizations. Students are also made acquainted with basic structural linguistic concepts and terminology as it relates to course content. This course is for fourth year Russian students.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Russian & East European Studies

RUSS 1420 - FOURTH-YEAR RUSSIAN 1

Minimum Credits: 3
Maximum Credits: 3
The course provides an extensive practice in oral communication at the advanced level. It includes discussions of readings on topics of general sociocultural interest, analysis of interviews with native speakers, and discussions of audio- and video-recordings. Home essays, oral presentations, and mock interviews are designed to emphasize students' management of the Russian discourse.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RUSS 1430 - FOURTH-YEAR RUSSIAN 2

Minimum Credits: 3
Maximum Credits: 3
The course provides an extensive practice in oral communication at the advanced level. It includes discussions of readings on topics of general socio-cultural interest, analysis of interviews with native speakers, and discussions of audio- and video-recordings. Home essays, oral presentations, and mock interviews are designed to emphasize students' management of the Russian discourse.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

RUSS 1780 - STALINIST CULTURE IN THE 1930'S

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

RUSS 1900 - RUSSIAN INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
This course places the student in a work setting where they can gain practical experience in a supervised training environment.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis

RUSS 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
This course allows students to work independently on individually designed projects.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

RUSS 1903 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course accommodates various topics in Russian literature and culture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

Serbo-Croatian

SERCRO 0010 - ELEMENTARY BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 1

Minimum Credits: 3
Maximum Credits: 3
This is a four-skills (listening, speaking, reading, writing) practical introduction to the Bosnian/Croatian/Montenegrin/Serbian languages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SERCRO 0020 - ELEMENTARY BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 2

Minimum Credits: 3
Maximum Credits: 3
This is a four-skills (listening, speaking, reading, writing) practical introduction to the Bosnian/Croatian/Montenegrin/Serbian languages, second-semester first-year.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

SERCRO 0030 - INTERMEDIATE BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 3

Minimum Credits: 3
Maximum Credits: 3
This is a four-skills (listening, speaking, reading, writing) practical introduction to the Bosnian/Croatian/Montenegrin/Serbian languages, first-semester, second-year.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

SERCRO 0040 - INTERMEDIATE BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 4

Minimum Credits: 3
Maximum Credits: 3
This is a four-skills (listening, speaking, reading, writing) practical introduction to the Bosnian/Croatian/Montenegrin/Serbian languages, second-semester, second-year.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SERCRO 0210 - INTENSIVE BEGINNING CROATIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in beginning Croatian language which is to be offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

SERCRO 0211 - INTENSIVE BEGINNING BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in beginning Bosnian/Croatian/Montenegrin/Serbian language, which is to be offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

SERCRO 0212 - BEGINNING BOSNIAN-CROATIAN-SERBIAN PITT-MONTENEGRO

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in beginning intensive Serbian which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Montenegro. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SERCRO 0213 - INTERMEDIATE BOSNIAN-CROATIAN-SERBIAN IN MONTENEGRO

Minimum Credits: 4
Maximum Credits: 4
This is a four week course in intermediate intensive Serbian conducted in Montenegro which follows the six-week Pittsburgh intensive course. Students must complete the prior course or have had at least three semesters of Serbian language, or a prior intermediate-level knowledge of the

language to register for this component.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SERCRO 0220 - INTERMEDIATE INTENSIVE SERBIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in intermediate Slovak which is offered as part of a summer intensive workshop in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SERCRO 0221 - INTENSIVE INTERMEDIATE BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in intermediate Bosnian/Croatian/Montenegrin/Serbian, which is offered as a part of a summer intensive workshop in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SERCRO 0223 - INTERMEDIATE INTENSIVE SERBIAN PITT- MONTENEGRO

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in intermediate intensive Serbian which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Montenegro. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SERCRO 0230 - ADVANCED INTENSIVE SERBIAN/CROATIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in advanced Serbian language which is to be offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SERCRO 0231 - ADVANCED INTENSIVE SERBIAN PITT-MONTENEGRO

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in advanced intensive Serbian which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Montenegro. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SERCRO 0233 - ADVANCED INTENSIVE SERBIAN IN MONTENEGRO

Minimum Credits: 4
Maximum Credits: 4
This is a four week course in advanced intensive Serbian conducted in Montenegro which follows the six-week Pittsburgh intensive course. Students must complete the prior course or have had at least five semesters of Serbian language, or a prior intermediate-level knowledge of the language to register for this component.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SERCRO 0240 - FOURTH YEAR SERBIAN/CROATIAN/BOSNIAN

Minimum Credits: 6
Maximum Credits: 6
This is a fourth-year language course in Serbian/ Croatian/ Bosnian open to those with an advanced knowledge and to heritage speakers who wish to improve their written and spoken communicative competence.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SERCRO 0400 - ADVANCED BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 5

Minimum Credits: 3
Maximum Credits: 3
This course (third-year first-semester Bosnian/Croatian/Montenegrin /Serbian) is a systematic review of grammar and phraseology, which develops the student's vocabulary, grammar and communicative competence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SERCRO 0410 - ADVANCED BOSNIAN/CROATIAN/MONTENEGRIN/SERBIAN 6

Minimum Credits: 3
Maximum Credits: 3
This course (third-year second-semester Bosnian/Croatian/Montenegrin/Serbian) is a systematic review of grammar and phraseology, which develops the student's vocabulary, grammar and communicative competence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SERCRO 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 4
This course allows students to work independently on individually designed projects in the Serbian and Croatian languages.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

Slavic

SLAV 0202 - BEGINNING INTENSIVE CZECH PITT-PRAGUE

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in beginning intensive Czech which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Prague, Czech republic. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate

Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SLAV 0210 - BEGINNING INTENSIVE TURKISH

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in beginning Turkish which is offered as part of the summer intensive workshops in East European languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLAV 0212 - INTENSIVE BEGINNING CZECH

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in beginning Czech language which is to be offered as part of the summer intensive workshop in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SLAV 0213 - BEGINNING INTENSIVE BULGARIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in beginning Bulgarian which is offered as part of a summer intensive workshop in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SLAV 0216 - BEGINNING INTENSIVE BULGARIAN PITT/BULGARIA

Minimum Credits: 10
Maximum Credits: 10
This is a course in beginning intensive Bulgarian language, the first six weeks held in Pittsburgh as part of the summer language institute, followed by four weeks of language study in Sofia, Bulgaria.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLAV 0220 - INTERMEDIATE INTENSIVE CZECH

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in intermediate Czech language which is to be offered as part of the summer intensive workshop in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLAV 0222 - INTERMEDIATE INTENSIVE CZECH - PRAGUE

Minimum Credits: 6
Maximum Credits: 6
This is an intensive course in intermediate intensive Czech which meets for six weeks during summer term in Prague, Czech republic. It is part of the

Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLAV 0223 - INTM INTNSV BULGARIAN/BULGARIA

Minimum Credits: 4
Maximum Credits: 4
This is a continuation of SLAV 0213, beginning intensive Bulgarian and is equivalent to the first semester of inter mediate second-year Bulgarian. This segment will be con ducted in Bulgaria and is part of the summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLAV 0226 - INTENSIVE INTERMEDIATE CZECH IN CZECH REPUBLIC

Minimum Credits: 4
Maximum Credits: 4
This is an intensive course in intermediate intensive Czech which meets for four weeks during summer term in Prague, Czech Republic. It is part of the Slavic, East European, and Near Eastern Summer Language Institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLAV 0230 - ADVANCED INTENSIVE CZECH

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in advanced Czech language which is offered as part of the summer intensive workshop in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLAV 0232 - ADVANCED INTENSIVE CZECH - PRAGUE

Minimum Credits: 6
Maximum Credits: 6
This is an intensive course in advanced intensive Czech which meets for six weeks during summer term in Prague, Czech Republic. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLAV 0234 - INTENSIVE ADVANCED CZECH IN CZECH REPUBLIC

Minimum Credits: 4
Maximum Credits: 4
This is an intensive course in advanced intensive Czech which meets for four weeks during summer term in Prague, Czech republic. It is part of the Slavic, East European, and Near Eastern Summer Language Institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLAV 0660 - SCI-FI: EAST AND WEST

Minimum Credits: 3
Maximum Credits: 3

This course compares Slavic and Anglophone science fiction to assess how a given culture's dominant values are articulated in a popular genre that enjoys different status in East and West. Those values emerge in works that imaginatively posit "fantastic" situations rooted in biological, spatial, and temporal explorations beyond those verified by science. On the basis of films, film clips, TV shows, stories, novellas, and novels we shall discuss such topics as utopia, progress, human perfectibility, the limits of science, and the nature of knowledge.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

SLAV 0880 - VAMPIRE: BLOOD AND EMPIRE

Minimum Credits: 3
Maximum Credits: 3
This course examines the phenomenon of vampirism in verbal and visual texts from different time periods in various cultures (Russia, Poland, France, England, America). We will analyze stories, novels, and films focusing on vampires from a variety of critical perspectives, contextualizing the works in the cultures that produced them.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

SLAV 1050 - COMPUTATIONAL METHODS IN HUMANITIES

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the use of computational modeling and programming to conduct text-based research in the humanities. Course goals include 1) learning how to identify research questions in the humanities that are amenable to computational analysis and processing and 2) designing and implementing xml-based computational systems to explore those questions. No prior programming experience or knowledge of foreign languages required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, DSAS Quant.-Formal Reason General Ed. Requirement

SLAV 1135 - ORTHODOX CHRISTIANITY

Minimum Credits: 3
Maximum Credits: 3
This course is designed as an overview of the history, teachings and rituals of Eastern Orthodox Christianity in its multinational context. Geographically, this context refers primarily to southeastern Europe, Russia and the coastal areas of the eastern Mediterranean, but there is also a significant Orthodox diaspora in the western hemisphere and in other parts of the world. We shall examine specific historical experience of Orthodox Christians in its Byzantine context, under Ottoman rule, in the Russian Empire, under communism, and beyond. We consider the broader context of Eastern Christianity (including Oriental Orthodoxy, the Church of the East, and Eastern Catholicism), as well as relations with Western Catholic and Protestant Christianity, and other religions and systems of belief (e.g., Judaism, Islam, atheism). Through lectures, readings, discussions, films, and a field trip to a local Orthodox church, students will gain an insight into multifaceted world of Orthodox Christianity: its spiritual practices, rich artistic, musical and ritual expressions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SLAV 1225 - BEHIND BARS: CROSS CULTURAL REPRESENTATIONS OF PRISON IN THE 20TH CENTURY

Minimum Credits: 3
Maximum Credits: 3
This course examines cultural works produced in and about prison in the 20th century, addressing the function of art within the context of incarceration. In structure the course is composed of three parts: prison writings and criminal culture in America, memoirs from the forced-labor camps of the soviet gulag, and narratives of holocaust concentration camps. This structure allows for a comparison of cultures-- American, Russian, and European--as well as identities-- racial, gender, and religious.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Literature General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

SLAV 1710 - UNDERGRADUATE TEACHER TRAINING

Minimum Credits: 1
Maximum Credits: 3
This is an elective course for gaining teaching experience under the supervision of the Slavic department faculty.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Russian & East European Studies

SLAV 1720 - UNDERGRADUATE TEACHING

Minimum Credits: 1
Maximum Credits: 3
This is an elective course for students who wish to gain teaching experience under the supervision of the Slavic department faculty.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course, Russian & East European Studies

SLAV 1850 - UNDERSTANDING THE BALKANS: INTRODUCTION TO BALKAN CULTURE AND LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Introduction to Balkan Culture and Literature course will be offered for the first time alongside the current Slavic department offerings and it comes at a very exciting moment of approving a minor in Bosnian/Croatian/Serbian. This course is an introduction to the Slavic countries of the Balkans (Bosnia and Hercegovina, Bulgaria, Croatia, Montenegro, North Macedonia, Serbia, Slovenia), focusing on the period from the 14th century up to the modern days. Students will study Balkan culture, literature and film (classic and modern), and through these and other readings learn about Balkan history, politics, literature and culture. In addition, they will come to appreciate the cultural nuances in the Balkans and gain an understanding of the various regional subjectivities and points of view. Trough this course, students will learn -to understand the term "Balkan" as both a construct and a geographical region -to become familiar with major authors of the region and their works -to gain a basic understanding of the cultural specificity of Balkan countries -to develop an appreciation for the literature and film of the region -to engage in productive dialogue and writing about cultural texts This class will appeal not only to the major and minors in Slavic but also to students from all areas of the Dietrich School of Arts and Sciences with an emphasis on those who are interested in pursuing certificates in the Russian and East European Studies, European Studies and Global Studies. Since this course is taught in English, students may learn about the region in a manner that best suits their interests and capabilities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SLAV 1865 - THE YEAR COMMUNISM CRUMBLED

Minimum Credits: 3
Maximum Credits: 3
This course is structured around the chronology of events in central and East Europe leading up to the demise of the old soviet union in 1991. The course will follow the results of the dramatic changes in Poland, Czechoslovakia, East Germany, Hungary, Romania, Bulgaria, Yugoslavia, and some of the former republics of the Soviet Union through the present time.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SLAV 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows students to work independently on individually designed projects.

Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

Slavic Language Institute - Non-Slavic Languages

SLI 0020 - BEGINNING INTENSIVE PERSIAN (FARSI)

Minimum Credits: 8
Maximum Credits: 8
This is a four skills intensive course in beginning Persian (Farsi) which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0030 - BEGINNING INTENSIVE ARABIC

Minimum Credits: 8
Maximum Credits: 8
This is a four skills intensive course in beginning Arabic which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLI 0031 - INTERMEDIATE INTENSIVE ARABIC

Minimum Credits: 8
Maximum Credits: 8
This is a four skills intensive course in intermediate Arabic which is offered as part of the summer intensive workshops in Slavic, East European, and Near Eastern Summer Language Institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLI 0040 - BEGINNING INTENSIVE TURKISH

Minimum Credits: 8
Maximum Credits: 8
This is a four skills intensive course in beginning Turkish which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLI 0050 - BEGINNING INTENSIVE HUNGARIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in beginning Hungarian which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLI 0052 - BEGINING HUNGARIAN PITT-HUNGARY

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in beginning intensive hungarian which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Debrecen, Hungarian. It is part of the Slavic, East European and near eastern summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0053 - INTERMEDIATE HUNGARIAN IN HUNGARY

Minimum Credits: 4
Maximum Credits: 4
This is an intensive course in intermediate intensive Hungarian which meets for four weeks during summer term in debrecen, hungary. It is part of the Slavic, East European and near eastern summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0062 - BEGINNING INTENSIVE LITHUANIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in beginning Lithuanian which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0063 - BEGINNING INTENSIVE ESTONIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in beginning Estonian which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0064 - INTERMEDIATE INTENSIVE LATVIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in intermediate Latvian which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0065 - INTERMEDIATE INTENSIVE LITHUANIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in intermediate intensive Lithuanian which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0066 - INTERMEDIATE INTENSIVE ESTONIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in intermediate intensive Estonian which is offered as part of the summer intensive workshops in Slavic, East European and near eastern languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 0067 - BEGINNING INTENSIVE LATVIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in beginning Latvian which is offered as part of the summer intensive workshops in East European languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLI 1900 - SUMMER LANGUAGE INSTITUTE INTERNSHIP

Minimum Credits: 1
Maximum Credits: 4
This course offers students of Pitt's Slavic, East European, and Near Eastern Summer Language Institute the opportunity to apply the language skills acquired through study at SLI to work and research at site specializing in the SLI regions and languages.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

Slovak

SLOVAK 0010 - ELEMENTARY SLOVAK 1

Minimum Credits: 3
Maximum Credits: 3
This four-skills language course introduces the student to the fundamentals of Slovak pronunciation and speaking, reading, writing and listening, with emphasis on practical conversation. The present tense of verbs, the plural of nouns, and the gradation of adjectives and adverbs is covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLOVAK 0020 - ELEMENTARY SLOVAK 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of Slovak 0010, this course extends the grammatical coverage to include verbal aspects, numeral expressions, and the locative, dative, and genitive cases. Emphasis continues to be on developing spoken language competence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

SLOVAK 0030 - INTERMEDIATE SLOVAK 3

Minimum Credits: 3
Maximum Credits: 3
The continuation of Slovak 0020, this course focuses more on written Slovak and developing listening comprehension than in the first-year course. Attention is paid to developing a good control of basic idioms, and to the formation of participles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLOVAK 0040 - INTERMEDIATE SLOVAK 4

Minimum Credits: 3
Maximum Credits: 3
The continuation of Slovak 0030, this course attempts to round out the student's basic oral competence in relation to specific matters of Slovak culture and reality. For many students, this course is preparatory to summer study in Slovakia.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLOVAK 0210 - INTENSIVE BEGINNING SLOVAK

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in beginning Slovak language which is to be offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies, West European Studies

SLOVAK 0211 - BEGINNING INTENSIVE SLOVAK PITT/SLOVAKIA

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in intermediate intensive Slovak which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Slovakia. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SLOVAK 0220 - INTENSIVE INTERMEDIATE SLOVAK

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in intermediate Slovak which is offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies, West European Studies

SLOVAK 0221 - INTERMEDIATE INTENSIVE SLOVAK PITT/SLOVAKIA

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in intermediate intensive Slovak which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Slovakia. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SLOVAK 0222 - INTERMIEDIATE INTENSIVE SLOVAK IN SLOVAKIA

Minimum Credits: 4
Maximum Credits: 4
This is a four week course in intermediate intensive Slovak conducted in Slovakia which follows the six-week Pittsburgh intensive course. Students must complete the prior course or have had at least three semesters of Slovak language, or a prior intermediate-level knowledge of the language to register for this component.

Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLOVAK 0230 - ADVANCED INTENSIVE SLOVAK

Minimum Credits: 6
Maximum Credits: 6
This is a four-skills intensive course in advanced Slovak which is offered as part of a summer intensive workshop in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: Russian & East European Studies

SLOVAK 0231 - ADVANCED INTENSIVE SLOVAK PITT/SLOVAKIA

Minimum Credits: 10
Maximum Credits: 10
This is an intensive course in advanced intensive Slovak which meets for six weeks during summer term in Pittsburgh, followed by four weeks of study in Slovakia. It is part of the Slavic, East European, and Near Eastern Summer Language Institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLOVAK 0232 - ADVANCED INTENSIVE SLOVAK/BRATISLAVA

Minimum Credits: 6
Maximum Credits: 6
This is an intensive course in advanced intensive Slovak language which meets for six weeks during summer term in Bratislava, Slovak republic. 140 Contact hours. It is part of the Russian and East European summer language institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: LG/SNC Elective Basis

SLOVAK 0234 - ADVANCED INTENSIVE SLOVAK IN SLOVAKIA

Minimum Credits: 4
Maximum Credits: 4
This is an intensive course in advanced intensive Slovak language which meets for four weeks during summer term in Bratislava, Slovak Republic. It is part of the Slavic, East European, and Near Eastern Summer Languages Institute.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade

SLOVAK 0380 - SLOVAK TRANSATLANTIC CULTURES

Minimum Credits: 3
Maximum Credits: 3
Slovak European history and the interaction of Slovak and American cultures during the 120-year history of Slovak immigration is conveyed through readings in Slovak and Slovak-American literature, and through issues in literary theory that concern this theme. The course is structured around the history of Slovak, and in a broader cultural sense central European, immigration to the United States with a special focus on Pittsburgh. The students are encouraged to investigate Pittsburgh's rich ethnic heritage and to research and write on topics tailored to their individual interests.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Literature General Ed. Requirement, Global Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

SLOVAK 0400 - ADVANCED SLOVAK 1

Minimum Credits: 3
Maximum Credits: 3
This course extends grammatical and conversational skills of those with an intermediate knowledge of Slovak. The course also covers aspects of Slovak culture and makes extensive use of contemporary texts from Slovakia. The students also learn elementary translation skills. Emphasis is put on fluency in conversation and on comprehension of unedited original reading material from newspapers and magazines.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLOVAK 0410 - ADVANCED SLOVAK 2

Minimum Credits: 3
Maximum Credits: 3
This course continues in developing skills learned in advanced Slovak 1. It extends the range of conversational topics and teaches more complex grammatical structures. It builds elementary skills needed to write brief essays in Slovak. The course also expands the students' translation skills and reading and listening comprehension.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLOVAK 0890 - SLOVAK, CZECH, AND CENTRAL EUROPEAN FILM

Minimum Credits: 3
Maximum Credits: 3
The course presents central European filmmaking in its cultural context, and central European (Czech, Slovak, Hungarian, etc.) Culture through film. The students learn to discuss them in their cultural context against the panorama of life in central Europe, as well as from the American perspective. The focus is both on film aesthetics, and on the social implications of the content of the films, which was considered crucial by central European directors, screenwriters, and audiences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Geographic Region General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Intensive Course (WRIT)

SLOVAK 1250 - A CULTURAL HISTORY OF SLOVAKIA

Minimum Credits: 3
Maximum Credits: 3
This course meets the needs of those interested in Slovak and central European affairs, history, cultures, peoples, languages and traditions. The history of Slovakia mirrors the history of many other central European peoples whose growing national aspirations have changed the area's political map on numerous occasions, most recently after the collapse of communism. The course also meets the needs of students interested in aspects of nationalism in Europe.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

SLOVAK 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows students to work independently on individually designed projects.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

UKRAIN 0010 - ELEMENTARY UKRAINIAN 1

Minimum Credits: 3
Maximum Credits: 3
A four-skill language course, this course introduces the student to the fundamentals of Ukrainian pronunciation and speaking, reading, writing and listening, with emphasis on practical conversation. The present tense of verbs, the plural of nouns, and the gradation of adjectives and adverbs is covered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

UKRAIN 0020 - ELEMENTARY UKRAINIAN 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of elementary Ukrainian 1, this four-skill language course extends the grammatical coverage to include verbal aspect, numeral expressions, and the locative, dative and genitive cases. Emphasis continues to be on developing spoken language competence.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

UKRAIN 0030 - INTERMEDIATE UKRAINIAN 1

Minimum Credits: 3
Maximum Credits: 3
The continuation of elementary Ukrainian 2, this course focuses more on written Ukrainian and developing listening comprehension than in the first-year course. Attention is paid to developing a good control of basic idioms, and to the formation of participles.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

UKRAIN 0040 - INTERMEDIATE UKRAINIAN 2

Minimum Credits: 3
Maximum Credits: 3
The continuation of intermediate Ukrainian 1, this course attempts to round out the student's basic oral competence in relation to specific matters of Ukrainian culture and reality. For many students, this course is preparatory to summer study in the Ukraine.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

UKRAIN 0210 - INTENSIVE BEGINNING UKRAINIAN

Minimum Credits: 6
Maximum Credits: 6
This is a four skills intensive course in beginning Ukrainian which is offered as part of the summer intensive workshops in Slavic languages.
Academic Career: Undergraduate
Course Component: Workshop
Grade Component: Letter Grade
Course Attributes: DSAS Second Language General Ed. Requirement, Russian & East European Studies

UKRAIN 0400 - ADVANCED UKRAINIAN

Minimum Credits: 3
Maximum Credits: 3
This is a course in advanced Ukrainian language (third-year, first semester) and is a four-skill course.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

UKRAIN 0410 - ADVANCED UKRAINIAN 2

Minimum Credits: 3
Maximum Credits: 3
This is a continuation (second semester, third year) course in advanced Ukrainian language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

UKRAIN 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
This course allows students to work independently on individually designed projects.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis
Course Attributes: Russian & East European Studies

Social Work

SOCWRK 1000 - INTRODUCTION TO SOCIAL WORK

Minimum Credits: 3
Maximum Credits: 3
Explores social work in terms of what the profession seeks (its goals); what it does to achieve those goals (its direct practice methods); which principles are to be reflected in all professional social work activity (its values and ethics); how the profession evolved (its history); which social issues are of particular concern to social workers (its special mission re: poverty, racism, sexism, among others); what types of agencies/services involve professional social workers (its fields of practice); and how effective is professional social work (its evaluative systems). This is a service learning course and requires 45 hours of volunteer service as part of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: Urban Studies

SOCWRK 1001 - INTRODUCTION TO SOCIAL WORK IN CIVIC ENGAGEMENT

Minimum Credits: 1
Maximum Credits: 3
Explores social work in terms of what the profession seeks (its goals); what it does to achieve those goals (its direct practice methods); which principles are to be reflected in all professional social work activity (its values and ethics); how the profession evolved (its history); which social issues are of particular concern to social workers (its special mission re: poverty, racism, sexism, among others); what types of agencies/services involve professional social workers (its fields of practice); and how effective is professional social work (its evaluative systems). This is a service learning course and requires 45 hours of volunteer service as part of the course. This course is required for only students participating in the Upperclass Service to Others Living Learning Community (LLC).
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

SOCWRK 1005 - FOUNDATIONS OF THE WELFARE STATE

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to examine the nature and structure of social welfare services and institutions; historical and cultural foundations of how societies have provided welfare services for people; current issues in the provision of services.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Attributes: Urban Studies

SOCWRK 1006 - POLICY ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
Engages students in analyses of the nature and impact of economic/political/social ideologies and forces which shaped the development of American social welfare policies and services from 1935 to present, including policies/services related to personal and social services, health and mental health, income redistribution and income maintenance, employment, and criminal justice and including discussions of the processes of policymaking itself. This is a service learning course and requires 45 hours of volunteer service as part of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SOCWRK 1000 and 1005

SOCWRK 1008 - ETHNICITY AND SOCIAL WELFARE

Minimum Credits: 3
Maximum Credits: 3
This course provides an understanding and working knowledge of the interface of ethnicity and race and the social welfare system. Critical ways in which the social welfare system has been shaped by ethnic and racial factors will be discussed, as well as the effects of race and ethnicity on the ways in which various ethnic and racial groups use the social welfare system, ways in which services/resources are allocated, and reasons that propel individuals and groups to seek out social services and resources.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: SOCWRK-BSW
Course Attributes: Global Studies

SOCWRK 1009 - CASE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the fundamental aspects of case management (service coordination), including common case management roles, processes, responsibilities, and employment challenges. Major content areas include: case management roles (including advocate, broker, resource coordinator), the roles and responsibilities of the multidisciplinary team (including nurses, social worker, physicians, and other disciplines), case management with special populations (forensic, geriatric, children, diverse populations), and the responsibilities of a case manager working in health care and mental health settings. Students will be introduced to the employment challenges of case management (types of programs that hire case managers, workforce retention issues, expectations of case manager, and job satisfaction). Students will develop familiarity with how case managers and clients interface with individual, group, and family systems. Students will develop knowledge of case management ethics and explore common ethical dilemmas and boundaries issues that confront case managers.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SOCWRK 1010 or PSY 1210 (MINGRADE: 'C-' for all listed Courses); Plan: Psychology(BS) or Social Work(BSW); LVL: Jr, Sr

SOCWRK 1010 - PRA MODL:HELP PEPL HELP SELVES

Minimum Credits: 3
Maximum Credits: 3
This course identifies generic principles of social work methods of intervention within a systems frame of reference. Didactic and experiential methods will be used.
Academic Career: UGRD
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Social Work students only.

SOCWRK 1011 - INTRODUCTION TO GENERALIST METHODS: SOCIAL WORK WITH INDIVIDUALS AND FAMILIES

Minimum Credits: 3
Maximum Credits: 3
Teaches interventive skills in casework with individuals and families, with emphasis on the problem-solving psychosocial, and behavioral approaches.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Social Work

SOCWRK 1012 - SOCIAL WORK WITH COMMUNITIES AND ORGANIZATIONS

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to macro practice through understanding and analyzing organizations and the relationship of organizations to the urban community. The focus is on the acquisition of practice skills in community organization, e.g. locality development, social planning, and social action.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Social Work (BSW) ; PREQ: SOCWRK 1011

SOCWRK 1013 - SOCIAL WORK WITH GROUPS

Minimum Credits: 3
Maximum Credits: 3
Introduces the student to social group work as a method in social work practice. The history of the development of groups in social work with emphasis on practice in the United States is also presented. Remedial, reciprocal and social goals models will be analyzed in relation to the worker's use of self, group, structure, group process, phase development and the agency functions used to achieve individual and group goals.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SOCWRK 1011 (MIN GRADE 'C-'); PLAN: Social Work

SOCWRK 1015 - HUMAN BEHAVR & SOCL ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to view the range of human needs and behavior as related to various conditions of the urban scene. Examines social, political, economic, and cultural factors which influence individual, group, and community social functioning.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: School of Social Work students only.

SOCWRK 1020 - INTRODUCTION TO SOCIAL WORK RESEARCH

Minimum Credits: 3
Maximum Credits: 3
This course is oriented to the reader and user of social work research. Using standard methodology texts and actual research studies, the lectures and discussions are designed to enable students to read and assess studies relevant to social work practice. In this process, the development and conduct of social research, as it applies to the issues and concerns of social work practice, is described and analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: Any Statistics Course; PLAN: Social Work (SOCWRK-BSW)

SOCWRK 1024 - PRACTICUM SEMINAR AND LAB 1

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is for students to be able to identify their feelings and behaviors as well as those of their clients and colleagues which affect the course of their interventions within their practice area.

Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: CREQ: SOCWRK 1025
Course Attributes: Capstone Course

SOCWRK 1025 - PRACTICUM 1

Minimum Credits: 6
Maximum Credits: 6
Placement in an agency will be made according to interest and educational need. Evaluation will be made of the student's ability to use classroom theories to enhance service.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: School of Social Work students only.
Course Attributes: Capstone Course

SOCWRK 1026 - PRACTICUM SEMINAR AND LAB 2

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to facilitate the student's development of a professional self through the integration of classroom and practicum learning and to provide students an opportunity to amplify their practice learning beyond their immediate placements as a result of guided interactional experiences with other students.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: SOCWRK 1024 (MIN GRADE 'C-'); CREQ: SOCWRK 1027
Course Attributes: Capstone Course

SOCWRK 1027 - PRACTICUM 2

Minimum Credits: 6
Maximum Credits: 6
A continuation of Practicum 1.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: Letter Grade
Course Requirements: School of Social Work students only.
Course Attributes: Capstone Course

SOCWRK 1030 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 6
Directed study provides students with opportunity to explore in-depth a specific social work area beyond that available in regularly scheduled courses. Students must secure a faculty mentor, develop a written plan and receive approval of the plan in order to register for a directed study.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

SOCWRK 1035 - GLOBAL PERSPECTIVES SOCIAL WORK

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the international dimensions of the human condition; the global context of responses to human need; and social development as an approach to global social work practice.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

Course Requirements: PREQ: SOCWRK 1000
Course Attributes: Global Studies

SOCWRK 1058 - ECONOMICS AND SOCIAL WORK

Minimum Credits: 3
Maximum Credits: 3
This course provides an understanding of basic economic theory, and discusses its application to social welfare policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: PREQ: SOCWRK 1000

SOCWRK 1059 - CHILD AND FAMILY ADVOCACY

Minimum Credits: 3
Maximum Credits: 3
This is a practical skills course in legal advocacy for non-lawyers. The emphasis is on practical techniques and courtroom skills to enhance the professional effectiveness of social workers in the courtroom setting. Typical areas of discussion include rules of evidence, legal procedure, expert witnesses, interview techniques, cross-examination, law reform, case review and readings and the legal rights of children.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis
Course Requirements: School of Social Work students only.

SOCWRK 1063 - AFRICAN-AMERICAN HEALTH ISSUES

Minimum Credits: 3
Maximum Credits: 3
Course will focus on black health issues from analytical, theoretical and practical perspectives. These perspectives will be introduced through cross-examination of health topics which are critical to the black population, the development of health policies and conceptual models for health promotion and disease prevention.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: School of Social Work students only.

SOCWRK 1079 - CHILD WELFARE SERVICES

Minimum Credits: 3
Maximum Credits: 3
Engages students in the study of child welfare, its historical roots, the services provided to families and children, the problems and policy issues in the current child welfare system and culturally competent practice. The study will focus on the etiology, rationale for service, and the current and future provision of services, with emphasis given to legislative mandates for service.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SOCWRK 1000

SOCWRK 1080 - BROWNE LEADERSHIP FELLOWS SEMINAR

Minimum Credits: 1
Maximum Credits: 1
This seminar engages students in a practice that will lead to their own professional growth and development. The primary focus of this seminar will be on the development of the knowledge, values, and skills of a professional. During seminars, browne fellows will begin program design and implementation strategies for the summer program. Fellows will have the opportunity to hear from experts in the field but spend significant time exploring the topics. The final assessment is focused on a presentation and poster session. Only students that have applied to and been accepted into the Browne Leadership Fellows program are eligible to enroll in this course.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SU3 Elective Basis

SOCWRK 1088 - SPECIAL TOPICS

Minimum Credits: 1
Maximum Credits: 3
Given the changing nature of generalist practice, the BASW program occasionally offers courses in new and/or unique content areas. This course is designed to provide skill and knowledge content not covered in other BASW courses.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SU3 Elective Basis

Sociology

SOC 0002 - SOCIOLOGY OF EVERYDAY LIFE

Minimum Credits: 3
Maximum Credits: 3
This course takes as its object of inquiry the ordinary, familiar, routine, and unremarkable stuff of everyday life, beginning from the premise that, rather than being insignificant or inconsequential, what happens in everyday life crucially structures the world. As well, daily life is structured by larger social phenomena. As such, the study of everyday life provides a lens through which to explore such themes as the workings and effects of power, social change or the lack thereof, social inequality, quiescence and resistance, ideology, identity and difference, norms and normativity, subject formation and subjectivity, and practices of meaning making. Our mode of analysis will be to bring sociological concepts and theory to the sites and practices of everyday life to refine our sociological thinking and our understandings of the world. Along with exposing students to different schools of thought with regard to the study of everyday life, this course will provide students with the necessary tools to defamiliarize and denaturalize that which might seem natural, obvious, and axiomatic. It also is designed to help students think about the relationship between social processes and the individual and about what is at stake in understanding how they mutually affect one another in any given context.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0003 - TECHNOLOGY AND SOCIAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
To acquaint the student with major sociological concepts, approaches and theories that are applicable to the analysis of the interaction between technology and society. The discussions are organized around three issues; 1. The effects of technology upon various aspects of the social structure and functioning, 2. The social conditions which lead to innovations and the diffusion of innovations throughout society, and 3. Technology assessment and environmental impact statement processes as they bear on current national decisions bearing on technology/society interfaces.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0005 - SOCIETIES

Minimum Credits: 3
Maximum Credits: 3
This introductory course is devoted to furthering an understanding of life in America today by comparing it to a variety of societies worldwide. Among the societal aspects explored; political and economic systems, cultural styles, major religions and religious trends.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Global Issues General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., West European Studies

SOC 0007 - SOCIAL PROBLEMS

Minimum Credits: 3
Maximum Credits: 3
The major aims of this course are to understand the nature of important social problems in American society and analyze their causes and consequences. The two competing perspectives, one, that social problems are created when individuals fail to conform to societal norms, and two, that social problems are caused when institutions fail to meet changing needs and aspirations of individuals will be used in our analysis. Future trends and policy alternatives toward amelioration will be examined.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0010 - INTRODUCTION TO SOCIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to the discipline of sociology, its development, theories, major findings, and to the sociological interpretation of modern society. Emphasis will be given to the importance of careful empirical investigation for the understanding of recent social and cultural changes. Students should be prepared to encounter basic issues in sociological method and in theory; an inclination toward systematic and abstract reasoning will help.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0140 - CLASSICAL SOCIOLOGICAL THEORIES

Minimum Credits: 3
Maximum Credits: 3
This course will deal with the foundations of modern sociological theory through a study of major social theorists of the 19th and early 20th centuries.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, Writing Requirement Course

SOC 0150 - SOCIAL THEORY

Minimum Credits: 3
Maximum Credits: 3
The aim of this course is to provide a survey of major developments in sociological theory in recent times. The classic background for these developments is included as part of the course. Lectures, readings and discussions help the student to acquire a grasp of the significance of theoretical analysis in sociology and of basic sociological problems addressed by a variety of theorists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0230 - SOCIAL RESEARCH METHODS

Minimum Credits: 3
Maximum Credits: 3
Students begin to learn to do social research in this course. They learn how to define an appropriate problem, select an appropriate method, collect and analyze data, discuss their results, and draw conclusions. Students study both quantitative and qualitative methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0312 - SCIENCE IN SOCIETY

Minimum Credits: 3
Maximum Credits: 3
The course aims at conveying an understanding of the social significance of science in modern society, dealing with questions of why science is valued, how society supports science, how scientists are selectively recruited and trained, how scientific activity is organized, and how scientific knowledge is utilized in society, especially in the United States and Europe. Focus is on the values attached to science by society, the interest in making new discoveries, organization of research, diffusion and transmission of scientific knowledge.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0317 - GLOBALIZATION

Minimum Credits: 3
Maximum Credits: 3
The aim is to analyze the dynamics of civilization in today's interconnected world. How is people's social and cultural life shaped by their position in the world, by local traditions and distant forces? How have the independently coexisting civilizations of earlier centuries become incorporated into a global civilization in which colonial empires and the communist regime have given way to wider democracy and a capitalist regime with global dynamics? How is Western culture (beliefs, values and symbols) disseminated and embraced, modified or resisted in non-Western societies?
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0333 - IDEOLOGIES AND SOCIAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
The role of ideology in promoting, thwarting or preventing change is examined. An inquiry is made into how an ideology is formulated and implemented and what channels are used for its diffusion. Various kinds of political, religious and scientific ideologies are analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0339 - SOCIOLOGY OF RELIGION

Minimum Credits: 3
Maximum Credits: 3
This course will compare and contrast major classical and modern sociological theories of religion, including discussion of the renewed focus on religion in mainstream, general theory. Attention will be narrowed to a focus on relation between religions, states and individuals in comparative and historical perspective.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0351 - SOCIAL CHANGE

Minimum Credits: 3
Maximum Credits: 3
Theories of social change will be evaluated in the light of case studies drawn from history and the contemporary world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

SOC 0352 - SOCIAL MOVEMENTS

Minimum Credits: 3
Maximum Credits: 3
This course offers ideological, structural, and functional treatment of dominant American movements for social and cultural change in our contemporary world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0411 - DECEPTION AND BETRAYAL

Minimum Credits: 3
Maximum Credits: 3
Students learn what sociologists and social psychologists have discovered about deception and betrayal in personal relationships, social institutions, national affairs, and international affairs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Global Studies, Writing Requirement Course

SOC 0424 - SMALL GROUPS

Minimum Credits: 3
Maximum Credits: 3
In this course, the study of small groups is viewed as one means of building general sociological knowledge. Such groups exhibit basic social processes, such as the emergence of status structures and of group cultures. Basic theory and research methods on such groups are treated. It is likely that the readings will include case studies of real groups that illustrate how group processes and structures are analyzed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

SOC 0431 - BUREAUCRACIES

Minimum Credits: 3
Maximum Credits: 3
This course examines bureaucratic organizations of all types (industrial, commercial, governmental, religious, educational, social welfare, etc.) giving special attention to decision-making. People make decisions according to bureaucratic rules, in problem-solving groups, and in interest groups which seek to win advantages for themselves and their members. Decisions and other organizational acts will be studied sociologically.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

SOC 0432 - WEALTH AND POWER

Minimum Credits: 3
Maximum Credits: 3
In this course we aim to understand the fundamental structure and workings of modern capitalist society. We will examine the distribution of wealth, income, and power in both the US and globally, and consider the notions of democracy and imperialism in the context of what we broadly call, "globalization". Can we have political equality in societies with high degrees of economic inequality? Are corporations too powerful? Whose side does government usually take the little guys' or the corporations'? Why? How is it possible that the richest nation in the world also has more poverty than any other "democratic" country? We will explore these and many other topics from the macro- to the micro- levels of analysis
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0434 - POLITICAL SOCIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course examines the relationship between political institutions and the institutions of the economy, family, education, religion, and stratification. With a major focus on American society and the conditions underlying stable democracy, these relationships are studied in historical and cross-societal comparative perspective as well as in terms of a society's location in the system of international relations.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0436 - SOCIAL ASPECTS OF SEXUALITY

Minimum Credits: 3
Maximum Credits: 3
Students consider the social analysis of human sexual behavior and experience. Topics considered include sexual motivation, masturbation, premarital intercourse, marital intercourse, extramarital intercourse, homosexuality, and sexual norms and values.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0438 - SOCIOLOGY OF THE FAMILY

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the sociological perspective on the family and analyzes how the structure and nature of family life are shaped by larger historical and social forces. We will look at how changes in the economy and technology affect the family; how ideas concerning gender roles affect male/female relationships and the socialization of children; how race, ethnicity, and class shape family life; and the wide variety of family forms, historical and contemporary.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Childrens Literature, DSAS Social Science General Ed. Requirement

SOC 0444 - URBAN SOCIOLOGY

Minimum Credits: 3
Maximum Credits: 3
The modern city is simultaneously many different things. It is an assortment of neighborhoods, it is a workshop with factories and offices, it is a crisscross of transportation arteries, it is a marketplace for the interplay of economic interests, it is an object which several different governments try to understand and control, and it is an astonishing mixture of religious, racial, ethnic, recreational, avocational, professional, educational, medical, political, social, and deviant communities. This urban complex will be studied with a sociological approach.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

SOC 0446 - SOCIOLOGY OF GENDER

Minimum Credits: 3
Maximum Credits: 3
This course will analyze the various processes and institutions through which gender roles are defined and shaped in our society. It will analyze the interaction between individual conceptions of gender and larger social institutions such as the family, the workforce, the media, religion, etc. The current changes in these roles will be related to changes in other social institutions. We will also examine the multiple forms of inequality in our society--based on sex, race, class, and sexual preference--and see how they interact.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 0460 - RACE AND ETHNICITY

Minimum Credits: 3
Maximum Credits: 3

This is a course presenting the central sociological interpretations of majority/minority relations. The course begins with a consideration of minorities around the world. With world minorities as a frame of reference, the course turns to the United States and its special opportunities and problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0465 - SOCIOLOGY OF SPORTS

Minimum Credits: 3
Maximum Credits: 3
This course examines sports from a political economy perspective, emphasizing wealth and power in this social institution. We will do a critical examination of the role of sports in society, amateur and professional sports and how they affect our lives. In the process, we inevitably see how sports affects how we see ourselves as a society and as individuals, including notions of class, race and gender among other things. The focus of my course is the political economy of sports including the peculiar American NCAA and Power 5 college athletics, and of course the colossal sphere of professional sports. This analysis will reveal all of the traits upon which this institution sits capitalism. That means we will see exploitation, profit and power, all in the gladiators arena of sports.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

SOC 0471 - DEVIANCE AND SOCIAL CONTROL

Minimum Credits: 3
Maximum Credits: 3
This course raises questions about what is "deviant" and how certain actions and beliefs come to be considered deviant. It also raises questions concerning the social, structural and cultural determinants of the decision to view something as "deviant" and in need of "control". The course explores changes in the definition of behavior which lead the same behaviors to be considered 'sins', 'crimes', 'illnesses', and 'alternative life-styles'.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

SOC 0472 - INTRODUCTION TO CRIMINOLOGY

Minimum Credits: 3
Maximum Credits: 3
Criminology refers to the scientific study of crime, its causes, and social responses to it. This course provides a broad overview of the study of crime. It examines the legal definitions and elements of crime; surveys the major categories of crime, i.e. predatory and non-predatory acts; reviews the major measures of crime; identifies the major correlates of crime, reviews and assesses the major theories of crime; differentiates types of offenders and explores various dimensions of their offending; and examines and evaluates the workings of the criminal justice system.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0473 - SOCIOLOGY OF GLOBALIZATION AND HEALTH

Minimum Credits: 3
Maximum Credits: 3
This course is designed to help students understand how economic and political globalization impacts health outcomes in the United States and around the world. In this course we will explore how a variety of global factors affect people's health and their access to health care. For instance, expanded international travel and migration contributes to the spread of infectious diseases and shapes a growing international labor market in health care. International economic policies such as patent law and trade agreements affect access to and delivery of health services and treatments and contribute to national, racial, and gendered inequities in health care. Climate change increases the prevalence of certain diseases and impacts availability of food and water. In addition, global economic forces shape the possibilities for national and local governments to provide for their citizens' basic human needs such as safe drinking water, nutrition, and a healthy environment. Students will gain enough familiarity with global processes to appreciate the multiple influences on human health that are relevant to careers in a variety of fields related to the physical and social sciences and the humanities. This course fulfills social sciences and foreign culture/international global general education requirements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 0474 - SOCIETY AND THE LAW

Minimum Credits: 3
Maximum Credits: 3
Every society regulates behavior and the means, i.e. Either informal or formal, with which this is done varies according to level of social development. This course examines the regulation of behavior in primitive, transitional, and modern societies and traces the development of law and legal systems and their relationship to different characteristics of social development. We will examine legal jurisprudence and the application of the principles of these philosophies and explore how they have shaped legal action.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0475 - SOCIOLOGY OF AGING

Minimum Credits: 3
Maximum Credits: 3
This course studies the fate of being old in American society in terms of income-adequacy, participation in political life, family relations, the status of retirement as an institution, health, the loss of independence and life in nursing homes. These and related issues are examined in cross-national perspective to assess the level and some nationally distinctive ways in which modern society cares for its elderly.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0477 - MEDICAL SOCIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This is a course on socio-cultural aspects of health, illness, disease and (medical) treatment in American society. The historical transformation of American medicine into a powerful sovereign profession with unparalleled authority, autonomy and control over all aspects of health and illness will be examined. On the basis of this historical survey, recent empirical studies of distribution of health, disease and medical care will be examined as well as specific substantive issues and contemporary debates.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0490 - MASS MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course deals with the many faceted roles of mass media in our society and explains how and why the media have achieved their present prominence and influence on our lives.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 0713 - ASIA NOW

Minimum Credits: 3
Maximum Credits: 3
The course is innovatively interdisciplinary, reflecting current anthropological theory. The topical focus is on contemporary Asia. It is creatively structured around a series of high-profile, public guest lectures given by leading, internationally recognized Asian Studies and Global Studies Scholars representing a spectrum of disciplines. The class will meet twice a week, once for a lecture and once for a seminar discussion focused on reading assignments chosen to highlight anthropological problems, questions and analytical perspectives that relate to the weekly guest lecture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1002 - SOCIOLOGY HONORS SEMINAR

Minimum Credits: 3
Maximum Credits: 3

The search for identities is an inseparable component of the postmodern "global" world. Individual and collective identities are in a constant state of formation and change. Using comparative case studies, we will examine various kinds of identity construction and transformation, including identities of race, ethnicity, nation and gender. Through the application of sociological insights, we hope to improve our understanding of these complicated processes
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SOC 0150 and 0230); PLAN: Sociology(BA); CUM GPA '3.25'

SOC 1107 - CULTURAL SOCIOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is a survey of theoretical approaches and substantive topics in the sociology of culture. We will look at how sociologists attempt to explain a range of contemporary cultural phenomena: national cultural differences in norms and values; cultural boundaries between groups; the negotiation of cross-cultural interpersonal exchanges in everyday life; the cultural classifications of objects and events in terms of structural codes; the organizational constraints on the production of cultural objects and activities; and how people consume or respond to cultural products.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1112 - ECONOMIC SOCIOLOGY

Minimum Credits: 3
Maximum Credits: 3
The aim of this course is to provide a broad macrosociological perspective on the economic aspects of societies. The necessary concepts of macrosociology are introduced as needed. Comparative studies in economy and society are supplemented by analysis of issues and problems in the sociological analysis of modern economic structures. The course may include special foci ranging from the capitalist world system to the changing nature of the work place.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1114 - QUALITATIVE RESEARCH METHODS

Minimum Credits: 3
Maximum Credits: 3
Qualitative research methods (sociology 1114) provides an introduction to qualitative research methods. The course will focus on interviewing and participant observation, the two main "fieldwork" methods. Together, the class will select a topic and design a project that will allow students to practice these methods and gain practical experience in qualitative research and writing. Students will be taught how to engage in participant observation, conduct in-depth interviews, analyze data, and write qualitative research reports.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, Writing Requirement Course

SOC 1115 - GLOBAL CHANGE AND MODERN LIFE

Minimum Credits: 3
Maximum Credits: 3
This course is directed at discussion of the processes involved in the making of the modern world into a single sociocultural system. It combines matters usually discussed in courses on modernization, the comparative analysis of whole societies, international relations, and the relationship between individual and societies into a cohesive whole. More specifically it combines the analysis of relations "between" societies with the analysis of changes "within" societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 1119 - GLOBAL PERSPEVTIVES ON POPULAR CULTURE

Minimum Credits: 3
Maximum Credits: 3
In this course we will use sociological perspectives to examine the role of popular culture in everyday life, with special emphasis on the global influence of the mass media industry, the relationship between cultural consumption and culture identity, and the social significance of cultural globalization in the 21st century. Specific topics include the rise of Pokmon, franchising Sesame Street, localizing American and Japanese television drama, blurring boundaries between news and entertainment and other.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Global Issues General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 1227 - REBELLION AGAINST AUTHORITY

Minimum Credits: 3
Maximum Credits: 3
The objective of this course is to explore how and why individuals and social groups rebel against authority. This course will investigate the conditions that stoke rebellion against immoral and oppressive power structures, shared conditions, and social norms; explain how we know when authorities are acting immorally or unjustly; analyze why injustice and illegitimacy only fuel rebellion in some cases and induce conformity in others; explore the various forms that resistance and rebellion can take, and theorize the factors that shape rebellion's varied forms, such as exit, sabotage, protest, withholding, reclamation, violent struggle, and revolution. The empirical topics covered will address a range of rebellion under tyranny, including rebellion during slavery in the united states, rebellion against Nazi power and the holocaust during world war II, and resistance to colonialism and imperialism, among other notable topics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1234 - SOCIOLOGY OF TOURISM

Minimum Credits: 3
Maximum Credits: 3
Tourism as a global social activity and as a global industry is analyzed through Sociological lenses in this course. The role of culture in the development of hospitality, leisure and travel in modern society, as are the socio-cultural impacts of tourism and the boundaries of hospitality. Focusing on the understanding of travel and leisure and the meaning of hospitality, the course introduces the student to tourism as a growing activity in a global environment. The course enables students to comprehend the social values defining hospitality for both hosts and guests, shaping tourists desire to travel. In addition, students taking the course are introduced to the social and cultural forces which define the image of tourism and leisure, as well as the social and political economy impacts of tourism development. This course demonstrates how travel and tourism can be media for social change in both positive and negative directions. Links between tourism and other sociological areas of inquiry, such as global perspectives; health, leisure and medicine; development; religion, and culture, are developed through this course. Likewise, specialized forms of tourism and relations between hosts and guests allow students to see how tourism development affect and are affected by inequalities of class, race, gender and sexuality.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1277 - PITTSBURGH AREA STUDY

Minimum Credits: 3
Maximum Credits: 3
Pittsburgh Area Study is a research practicum. This course will give hands-on research experience examining gender and race equity within the city of Pittsburgh. Students in this course will be a part of a larger project that has been commissioned by the City of Pittsburgh to evaluate current equity and write a report for the city. This report will then be used to inform policy makers creating initiatives gear at fostering opportunities. In the course, students will conduct background information, collect primary data, conduct both quantitative and qualitative analyzes, write sections of the report as well as other associated research tasks. Some previous courses in social science methodology are strongly encouraged.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

SOC 1286 - RACE AND THE CITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1317 - SOCIOLOGY OF LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will examine the sociological dimensions of literature. In general terms, this involves considering how the creation, reception, and content of literary works are affected by the organizational and structural features of institutions and social life. Topics to be discussed include: the social status of authors, the various gate keeping roles in the publishing industry, the ways in which literary works may reflect certain aspects of social life, changes in the practices of reading, and the effects of literature as a cultural product on its readers. A term paper will be required examining a current topic in the sociology of literature. The course will be taught using both lectures and discussions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

SOC 1319 - IMMIGRATION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies, Writing Requirement Course

SOC 1321 - APPROACHES TO ANTISEMITISM

Minimum Credits: 3
Maximum Credits: 3
We survey historical, sociological, psychological, religious and political approaches to expressions of antisemitism as we study scholarly treatment of the phenomenon in the 20th century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1324 - SOCIAL PROBLEMS AND MORAL CRUSADES

Minimum Credits: 3
Maximum Credits: 3
Social problems and moral crusades (SOC 1324) examines how and why certain issues become recognized as "social problems" and sometimes become the subject of "moral crusades." Using a social constructionist approach, the course examines conflicts over how issues are defined and periods of intense media and public interest in particular problems. We will look at some new issues that are becoming recognized as social problems and we will analyze changes over time in long-standing conflicts, examining the origins of these conflicts, the reasons why they persist, and their likely outcomes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1325 - TWO CENTURIES OF DEMOCRATIZATION

Minimum Credits: 3
Maximum Credits: 3
Democratization has advanced in modern history in several great multicontinental bursts from the late eighteenth century to the present. This course will explore why certain historical eras are such moments of democratization and how the very conception of democracy has developed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1359 - CONTEMPORARY ARAB SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 1360 - PEACE MOVEMENTS AND PEACE EDUCATION

Minimum Credits: 3
Maximum Credits: 3
This course focuses on two major components in the field of peace studies; peace movements and peace education. Key concepts (e.g. peace, war, violence, conflict, justice, equality, democracy, and citizenship) and theories are discussed. Movements for (inter-personal, inter-group, and international) peace initiated by people in the United States and other countries historically and today will be analyzed. School-, university-, and community-based peace education programs developed in various countries will also be examined.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1362 - REVOLUTIONARY SOCIAL MOVEMENTS

Minimum Credits: 3
Maximum Credits: 3
A broad survey of social revolutionary movements of the past, such as those leading to the French and Russian revolutions, and their influence on various movements taking place in third world countries of today. Emphasis will be placed on movements presently underway in Latin America.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 1364 - RACE AROUND THE WORLD

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

SOC 1365 - RACE, CLASS, AND GENDER

Minimum Credits: 3
Maximum Credits: 3
This comparative course draws together a multidisciplinary set of readings to examine the intersection of race, gender and social and economic development in Latin America and the USA. Readings include theories of inequality and case studies.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 1386 - FRENCH REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course will consider various theories of the social sources of revolutions and evaluate them in the light of historical research.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1405 - RELIGION AND SEXUALITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1413 - MARRIAGE

Minimum Credits: 3
Maximum Credits: 3
This course considers husband-wife relations and problems of sex, economic roles, leisure activity, and conflict resolution; family planning, childrearing, and family life and finances are examined; and finally the processes of growth or deterioration among couples are analyzed, including the possibilities of divorce and remarriage.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Global Studies

SOC 1414 - SPECIAL TOPICS

Minimum Credits: 1
Maximum Credits: 3
Current topics of particular sociological interest. Topics covered vary with instructor and term.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

SOC 1415 - RELIGIOUS DIVERSITY

Minimum Credits: 3
Maximum Credits: 3
What is the best way to accommodate religious and cultural diversity within a nation-state and in civil society? How should individual rights to practice religion be balanced with communal needs? Should freedom from religion be protected as much or more than freedom of religion? These are pressing contemporary issues in many countries, including the United States, but issues of religious diversity and questions of how - and even whether- to tolerate religious minorities have a long history. In this course, we will examine the toleration of minority religions in particular historical settings, and the issues and problems (both doctrinal and social/political) that societies grappled with as they confronted diverse religious landscapes. We will also use these historical precedents as a lens to examine contemporary examples of religious pluralism, diversity, and conflict. Case studies will mainly be drawn from pre-modern Europe and modern Europe and North America, but we will also look at Mughal and modern India and discuss religion in pre-modern China.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Global Issues General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 1416 - SEX GENDER SEXUALITY AND THE BRAIN SCIENCES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1437 - COMMUNITY/TOURISM ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
An introductory course on application of sociological, eco logical, and sustainability principles to the analysis of communities engaged in tourism, in terms of their social, economic, political, ecological, and selected contemporary community problems, and an attempt to relate sociology to tourism development. In particular, we aim to comparatively assess a range of tourism development modalities - e.g. ecotourism, sport, cultural, classical, health/botanical tourism, etc. in view of quality of life indicators.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SOC 1440 - EXPERIENCING GLOBALIZATION

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement

SOC 1445 - SOCIETY AND ENVIRONMENT

Minimum Credits: 3
Maximum Credits: 3
The state of the environment reaches the pages of our newspapers every day. How did we get to this state? Throughout history, human societies have made use of the environment as all human activity is dependent on through puts of energy and materials. The course will seek to understand the social, economic, and political processes as they lead to impacts on the environment. Far from being 'out there', the state of the environment is integrally related to the ways societies work.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Global Issues General Ed. Requirement, DSAS Social Science General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., Writing Requirement Course

SOC 1446 - CONSUMPTION & EVERYDAY LIFE

Minimum Credits: 3
Maximum Credits: 3
We buy things almost every single day of our lives. Drawing on theories and examples within everyday life, students will be exposed to both historical and contemporary approaches to consumption: 1) `History': we survey theories about the rise of the `new' bourgeois consumer; globalization and Mcdonaldization; the rise of advertising and branding; and the beginnings of retail psychology. 2) `Theory': we look to Barthes, de Certeau, Bourdieu, Zizek and others to consider associations between consumption, identity, and meaning-making; appropriation; the rise of ethical consumption; gender and domestic consumption; the commodification of the body and senses.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1448 - WORKING WOMEN

Minimum Credits: 3
Maximum Credits: 3
This course studies traditional patterns of women employment, recent gains and changes, and prospects for the future. One aim of the course is for students to gain an understanding of their own work experiences and career plans, as well as those of various groups of women, in relation to broad social and economic changes that are reshaping work in industrial societies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies, Writing Intensive Course (WRIT)

SOC 1450 - HEALTH AND ILLNESS

Minimum Credits: 3
Maximum Credits: 3
This upper-level course investigates selected concepts in health, illness and medical care. We will examine the impact of medicalization, stratification, and the transformation of healthcare provision.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req.

SOC 1476 - URBAN POLICY AND PLANNING

Minimum Credits: 3
Maximum Credits: 3
This course will provide a brief review of migration and urban growth during the last several decades. The process or urban policy formulation and implementation will be studied. An attempt will be made throughout the course to show the relationships between economic and social conditions and the way they define the parameters of urban policy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1486 - WAR & MILITARY IN UNITED STATES

Minimum Credits: 3
Maximum Credits: 3
A lecture-discussion course on the roles military systems play in international & national affairs, as well as in the social and economic life of the U.S. the effects that wars and military service have on the individual, the family, the economy, and politics are also addressed. This is not a course on battles, tactics, logistics, strategy, and command. It is concerned with recruitment & social origins of military personnel; training and value inculcation; combat behavior and morale; war crimes and the laws of war; civil military relations; veterans; & inter-service rivalry.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1488 - HISTORY MEDICINE AND HEALTH CARE

Minimum Credits: 3
Maximum Credits: 3
Provides an overview of the social history of medicine from prehistory to the present. Focuses on the emergence of medical institutions, education, theories, practices and the orthodox and irregular medical sects. Describes the growth of the separate disciplines of nursing, pharmacy and public health. Examines the impact of socioeconomic factors, religions and war on the evolution of medical science. Discusses the changing roles of government in the development of the American health care system.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Historical Analysis General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

SOC 1500 - CAPSTONE RESEARCH PRACTICUM FOR MAJORS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SOC 0150 and 0230
Course Attributes: Capstone Course

SOC 1501 - CULTURAL IDENTITY AND MULTICULTURALISM IN CONTEMPORARY FILM

Minimum Credits: 3
Maximum Credits: 3
This class will examine the ways in which racial and ethnic differences have been visualized in the United States and Argentina. Students will study how Hollywood has created films that analyze issues of race and ethnicity in a multicultural United States and, in a comparative perspective, examine how independent filmmakers have portrayed ethnic relations in Argentina's social and economic reality of the 21st century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1502 - SOUTH AMERICAN IDENTITIES, SOCIETIES, AND CULTURES

Minimum Credits: 3
Maximum Credits: 3
This course approaches sociology from a Latin American standpoint. It deals with some of the main, and classical, sociological concepts and theories, to later explore them in the Latin American context. The class provides students with theoretical tools to analyze society and social process. It will develop, and encourage, critical and reflective thinking about contemporary social life and social structures in general, and in Latin America in particular. In this course students will not only be introduced to some of the principal theories, concepts, and ideas in sociology, but they will also explore them from a Latin American point of view and by focusing on Latin American social processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1503 - CONTEMPORARY ISSUES: BOLIVIA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to issues facing current Bolivian society from multiple disciplines. The focus will be on the historical, geographical, social, economic, political and cultural contexts. Topics that will be discussed include indigenous healthcare, health policy, education, interculturality, gender, and the war on drugs. Students will learn through lectures, observations and personal communication with the local Cochabamba community about social realities, social change, and local challenges.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1504 - ISLAM AND BRITAIN

Minimum Credits: 3
Maximum Credits: 3
This course examines how multiethnic diversity shapes and defines our understanding of modern Britain, through a specific focus on Muslim communities in London and the nature of their interactions with wider society. Students analyze the ways in which imperialism and its legacy, as well as Britain's global relationships, have influenced political policies and social attitudes toward multiculturalism and Muslim groups in particular.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1506 - SPORT IN AUSTRALIAN SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course will introduce the role of sports in Australian culture, their historical context through to their importance in todayâs Australian society. Students will examine the central role of sports in the development of the Australian character and identity; investigate the ways in which they have helped forge, and provide, a focus for Australian nationalism; explore the projection of Australians internationally on the global sporting stage; discuss the role of ethics in sports; and develop an understanding of sports as a reflection of the Australian identity throughout history.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1507 - UNDERSTANDING MODERN BRITAIN

Minimum Credits: 3
Maximum Credits: 3
One of the most effective ways of understanding a nation is by examining the images, values, symbols, and individuals by which a nation represents itself. This multi-disciplinary course explores a variety of forms of national representations, ideals and icons to investigate the ways in which modern Britain and British identities have been imagined, constructed, and experienced at home and internationally.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1508 - IMMIGRATION AND MIGRATION - SYDNEY

Minimum Credits: 3
Maximum Credits: 3
This course will explore the causes and consequences of migration for communities, personal identities, national identities, politics, ethics, and the environment. Students will examine various reasons for people-moving and moving people across borders; investigate the myths and controversies involved; develop an understanding of how notions of belonging, citizenship, nationality, nationhood, and âthe otherâ are constructed, proliferated, and manipulated; contextualize Australiaâs involvement and reaction to immigration in a global schema; analyze related case studies drawn from both Australian and international examples; and participate in field trips.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1509 - CONTEMPORARY ISSUES THROUGH SERVICE-LEARNING

Minimum Credits: 3
Maximum Credits: 3
This service-learning course combines a structured curriculum and extensive partnership with a local community-based organization to offer tangible community service. Here, student community service includes direct engagement as well as a research-based action plan addressing a specific challenge or goal identified by a community-based organization. . Student service-learning will include exploring the proximate and ultimate drivers of the organizationâs chosen challenge, and the organizationâs infrastructure, resources, limitations and possibilities for reducing barriers to achieving the organizationâs self-identified goals. In concert, coursework probes the role of community-based organizations in both local and global contexts, common challenges of community-based organizations in defining and implementing their goals, the role of service-learning in addressing these issues, and effective ways for students to help them achieve their mission, vision, and goals. Coursework also guides the studentâs service-learning experience by helping students develop sound international service ethics, provide tools to investigate solutions to common development issues, aid in data analysis and presentation, and provide best practices to illustrate findings and deliver approved joint recommendations orally and in writing. Throughout, students use service-learning as a means to expand their global awareness and understanding, explore shared aspirations for social justice, and develop skills to work with others to effect positive change.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1510 - EXPERIENCE GLOBALIZATION: SOCIETY, SPACE & EVERYDAY LIFE IN LONDON

Minimum Credits: 3
Maximum Credits: 3
The course aims to trace the play of uneven and contested globalizing processes as well as trans-local and transnational forms of connection and division in the lives of the people students will encounter during their studies and / or service placements, as well as the forms of social activism and political struggle that have emerged to address the challenges that these people face in everyday life. This course also allows students to identify and

assess the factors that have been most significant in shap-ing the ways these developments have been unfolding globally, in relations between London, its inhabitants, and the wider world, and in the specific settings students encounter in field studies and / or service-learning placements.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1511 - SERVICE-LEARNING

Minimum Credits: 3
Maximum Credits: 3
This service-learning course combines a structured curriculum and extensive partnership with a local community-based organization to offer tangible community service. Here, student community service includes direct engagement as well as a research-based action plan addressing a specific challenge or goal identified by a community-based organization. . Student service-learning will include exploring the proximate and ultimate drivers of the organizationâs chosen challenge, and the organizationâs infrastructure, resources, limitations and possibilities for reducing barriers to achieving the organizationâs self-identified goals. In concert, coursework probes the role of community-based organizations in both local and global contexts, common challenges of community-based organizations in defining and implementing their goals, the role of service-learning in addressing these issues, and effective ways for students to help them achieve their mission, vision, and goals. Coursework also guides the studentâs service-learning experience by helping students develop sound international service ethics, provide tools to investigate solutions to common development issues, aid in data analysis and presentation, and provide best practices to illustrate findings and deliver approved joint recommendations orally and in writing. Throughout, students use service-learning as a means to expand their global awareness and understanding, explore shared aspirations for social justice, and develop skills to work with others to effect positive change.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SOC 1515 - SPECIAL TOPICS STUDY ABROAD

Minimum Credits: 3
Maximum Credits: 3
Current topics of particular sociological interest, topics will be covered from various universities through the study abroad program.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Pitt Class

SOC 1706 - TAIWAN DIASPORA

Minimum Credits: 3
Maximum Credits: 3
To better understand the fundamental thrust and impact of the Taiwanese diaspora, and its connection to globalization, this course is designed to explore the major forces that have shaped Taiwanese diasporic identities and overseas communities primarily during the 20thcentury. Students will read articles and books as well as journalists' reports to familiarize themselves with the range of concepts and debates that analyze Taiwanese-diasporic issues.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

SOC 1717 - MODERN TAIWAN: 1500-1980

Minimum Credits: 3
Maximum Credits: 3
This course teaches students about the social, cultural and economic factors that have shaped modern Taiwan, a critically important nation in the development of globalization in Asia.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

SOC 1771 - KINSHIP AND THE FAMILY

Minimum Credits: 3
Maximum Credits: 3
In this course Western and nonwestern forms of kinship, family, and marriage will be discussed and analyzed. Special attention will be given to the

history of European marriage, to family organization and industrialization, and to women's relation to kinship and family order. The differences in European and non-European reactions to industrialization will be compared in some detail. Europe, China, India, and Japan will receive special attention.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Social Science General Ed. Requirement

SOC 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
A sub-category of independent study, in which the student is in some sense employed (usually as a volunteer but sometimes for pay) in a non-academic position, typically under the direct supervision of someone other than an F.A.S. faculty member, in which the experience gained by the student is directly related to an academic discipline, and which the student's learning is evaluated and graded by a faculty member.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

SOC 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
The student undertakes, under specific conditions, an independent program of study, research, or creative activity usually off-campus and with less immediate and frequent guidance from the sponsoring faculty member than is typically provided in directed reading and directed research courses.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

SOC 1902 - DIRECTED READING

Minimum Credits: 1
Maximum Credits: 6
The student undertakes a specified course of study, comparable in character to a regular course, under the direct supervision of a faculty member.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

SOC 1903 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 6
The student undertakes a defined task of research on campus under the supervision of a faculty member of an appropriate department, and in which the fruits of the research are embodied in a thesis, extended paper, laboratory report, or other appropriate form.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

Spanish

SPAN 0001 - ELEMENTARY SPANISH 1

Minimum Credits: 3
Maximum Credits: 3
This course is designed to develop the student's communicative proficiency through an integrated approach to the teaching of all four language skills: listening, speaking, reading and writing. Grammatical structures; vocabulary and readings are presented as tools for developing good communication skills. The course also aims to foster cultural awareness of the Spanish-speaking world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 0002 - ELEMENTARY SPANISH 2

Minimum Credits: 5
Maximum Credits: 5
A continuation of Spanish 0001, the course builds on the skills acquired in the first term as students continue to develop their communicative language skills in Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 0003 - INTERMEDIATE SPANISH 3

Minimum Credits: 3
Maximum Credits: 3
This course builds on the skills acquired during the elementary sequence (either Spanish 0001 and 0002 or Spanish 0015). It includes a functional review of the basic language structures and introduces even more complex structures. The course has a strong cultural component.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement

SPAN 0004 - INTERMEDIATE SPANISH 4

Minimum Credits: 3
Maximum Credits: 3
A continuation of Spanish 0003. Students continue to refine their language abilities and enhance their communicative competence. The course has a strong cultural component.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 0020 - CONVERSATION

Minimum Credits: 3
Maximum Credits: 3
The goal of this fifth-semester course is to enhance fluency and the development of oral proficiency in Spanish. Although the emphasis is on speaking and listening skills, reading and writing assignments are an important part of the syllabus. This course helps students to improve their fluency, pronunciation, and strategic competence such as paraphrasing skills, and increases their vocabulary through readings, films, digital recordings and other authentic materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0004 (MIN GRADE 'B+') or Spanish Placement Test Score equal/greater 20

SPAN 0025 - GRAMMAR AND COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This course reviews Spanish grammar, and, in addition, is designed to aid the students in vocabulary building, improving their knowledge of idiomatic usage, and their ability to translate from English to Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0004 (MIN GRADE 'B+') or Spanish Placement Test Score equal/greater 20

SPAN 0050 - SPANISH CIVILIZATION

Minimum Credits: 3
Maximum Credits: 3
Span 0050 offers a comprehensive survey of Spanish history and civilization from the early prehistory period to the present. Readings and lectures are in Spanish.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: [PREQ: SPAN 0020 and 0025 (MIN GRADE 'C' for Listed Courses); PLAN: Spanish (BA or BPH)] or [CREQ: SPAN 0020 or 0025 (MIN GRADE 'C' for Listed Courses); PLAN: Spanish (MN)]
Course Attributes: Latin American Studies, West European Studies

SPAN 0082 - LATIN AMERICA TODAY

Minimum Credits: 3
Maximum Credits: 3
This course is an overview of contemporary Latin America and its people and is designed to be an introduction for students who have no previous knowledge of the area. Students will be exposed to several aspects of Latin America. A special attempt will be made to show contemporary social reality as interpreted by some of the region's most gifted writers. In English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, Latin American Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SPAN 0101 - ELEMENTARY SPANISH 1

Minimum Credits: 3
Maximum Credits: 3
This course is designed to develop the student's communicative proficiency through an integrated approach to the teaching of all four language skills: listening, speaking, reading and writing. Grammatical structures; vocabulary and readings are presented as tools for developing good communication skills. The course also aims to foster cultural awareness of the Spanish-speaking world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 0102 - ELEMENTARY SPANISH 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of Elementary Spanish 1, training in spoken and written Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement, UPB Global General Ed. Requirement, UPB Language General Ed. Requirement

SPAN 0103 - INTERMEDIATE SPANISH 3

Minimum Credits: 3
Maximum Credits: 3
This course builds on the skills acquired during the elementary sequence (either Spanish 0001 and 0002 or Spanish 0015). It includes a functional review of the basic language structures and introduces even more complex structures. The course has a strong cultural component.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement

SPAN 0104 - INTERMEDIATE SPANISH 4

Minimum Credits: 3
Maximum Credits: 3
A continuation of Spanish 0003. Students continue to refine their language abilities and enhance their communicative competence. The course has a strong cultural component.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0003 or 0103 (MIN GRADE 'C') or Spanish Placement Test Score equal/greater 4

SPAN 0115 - INTENSIVE ELEMENTARY SPANISH

Minimum Credits: 3
Maximum Credits: 3
This is a condensed version of the first two courses of the Spanish language program (Spanish 0101 and 0102, formerly 0001 and 0002), and it has been designed for students who have taken at least two years of high school Spanish or its equivalent. Spanish 0115 follows a communicative approach: from the first day of class you will interact in Spanish in a meaningful context with your instructor and classmates. By the end of this course you will have a general knowledge of the grammar of the Spanish language and you will be able to communicate effectively in Spanish according to this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Second Language General Ed. Requirement

SPAN 0120 - CONVERSATION

Minimum Credits: 3
Maximum Credits: 3
The goal of this fifth-semester course is to enhance fluency and the development of oral proficiency in Spanish. Although the emphasis is on speaking and listening skills, reading and writing assignments are an important part of the syllabus. This course helps students to improve their fluency, pronunciation, and strategic competence such as paraphrasing skills, and increases their vocabulary through readings, films, digital recordings and other authentic materials.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0004 or 0104 (MIN GRADE 'C+') or Spanish Placement Score equal to 20
Course Attributes: Latin American Studies, West European Studies

SPAN 0125 - GRAMMAR AND COMPOSITION

Minimum Credits: 3
Maximum Credits: 3
This course reviews Spanish grammar, and, in addition, is designed to aid the students in vocabulary building, improving their knowledge of idiomatic usage, and their ability to translate from English to Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0004 or 0104 (MIN GRADE C+) or Spanish Placement Test Score equal/greater 20
Course Attributes: Latin American Studies, West European Studies

SPAN 0126 - SPANISH ADVANCED GRAMMAR AND COMPOSITION FOR HERITAGE SPEAKERS

Minimum Credits: 3
Maximum Credits: 3
This course is specially designed for Spanish Heritage students who already understand and speak Spanish but they communicate almost exclusively in English and for students who speak Spanish mostly in informal settings and would like to improve their writing and spelling skills. This course aims to identify the skills that the heritage students already bring with them and develop them further. Through readings and film screenings, class presentations, discussions and debates, writing workshops and peer editing, this course seeks to strengthen the studentÂ´s confidence in the language. Students will review basic grammar structures and spelling, expand vocabulary and develop writing skills. The goal of this course is also to expose students to different products, practices, and perspectives from the Hispanic cultures in the US and abroad.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1031 - ELEMENTARY SPANISH 1 FOR MBAS

Minimum Credits: 2
Maximum Credits: 2
This is an introductory conversational course specifically designed for business students who do not know Spanish. The student will be presented

with the basic structures of the language, as well as the necessary vocabulary to be able to understand simple Spanish and converse on everyday ("survival skills") topics. The course, conducted in Spanish, will be relatively fast-paced, and will require students to participate actively in a variety of exercises, group activities, and exchange of information.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1032 - ELEMENTARY SPANISH 2 FOR MBAS

Minimum Credits: 2
Maximum Credits: 2
Spanish 0032, designed specifically for business majors, is a continuation of 0031 at the elementary level. Emphasis is on improving listening and speaking skills, with consider able in-class conversational practice. New grammatical structures and increased vocabulary are introduced. Limited business language will be included, along with selected cultural information.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1055 - INTRODUCTION HISPANIC LITERATURE 1

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the study of Spanish and Latin American literatures, while dealing with concepts and terms that can be applied to all literature.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 or 0120] and [SPAN 0025 or 0125] (Min Grade 'C' for all listed courses); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Latin American Studies, Writing Intensive Course (WRIT)

SPAN 1056 - NARRATIVE MEDICINE & ANALYTICAL WRITING

Minimum Credits: 3
Maximum Credits: 3
What is literature? What does the literary do? This course, conducted in Spanish, is designed to introduce students to the study of Hispanic literature, while the same time dealing with concepts which can be applied to all literature. We will analyze Hispanic literature understood in its broadest sense, touching upon significant works, genres, movements, and authors from Spain and Latin America, all of which will have either health-related themes or relevance to the field of narrative medicine. More than a survey course, however, this course is designed to teach students how to read literature, how to write about it, and why it matters. In partial answer to this question, this course is an introduction to the health humanities and narrative medicine in Spanish. Students will learn how narrative is central to empathy, to cultural competence, to the expression and processing of pain, sickness, and healing, and how developing the skills to interpret narratives and interact with them is key to promoting global health.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

SPAN 1250 - HISPANIC CIVILIZATIONS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 or 0120] and [SPAN 0025 or 0125] (Min Grade 'C' for all listed courses)
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SPAN 1260 - OVERVIEW OF SPANISH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
Overview of Spanish literature

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 or 0120] and [SPAN 0025 or 0125] (Min Grade 'C' for all listed courses)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

SPAN 1280 - OVERVIEW OF LATIN AMERICAN LIT

Minimum Credits: 3
Maximum Credits: 3
Overview of Latin American literature
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 or 0120] and [SPAN 0025 or 0125] (Min Grade 'C' for all listed courses)
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

SPAN 1300 - SPANISH PHONETICS AND PHONEMICS

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the study and practice of the sounds of Spanish. The overall objective of this course is to understand the sound system of Spanish as compared to English. Successful students will develop good auditory perception of Spanish and awareness of their own pronunciation, which could help to improve it.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 and 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (BA, BPH)] or [SPAN 0020 or 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (MN)]
Course Attributes: Latin American Studies, West European Studies

SPAN 1302 - ADVANCED COMPOSITION AND STYLISTICS

Minimum Credits: 3
Maximum Credits: 3
This writing course builds upon the student's knowledge of Spanish grammar and composition. In particular attention will be given to the many syntactical and lexical usages that the foreign language learner needs to incorporate in advanced writing. The teacher will help the student improve and polish his/her individual style, with some imitation of literary models.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 and 0025 (MIN GRADE 'C') PLAN: Spanish BA, BPH, MN] or [SPAN 0020 or 0025 (MIN GRADE 'C') ; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Latin American Studies, West European Studies, Writing Requirement Course

SPAN 1303 - SEMINAR IN LANGUAGE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course will deal in depth with various cultural and linguistic topics.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 1400 or 1600) and SPAN 0050 (MIN GRADE 'C' for Listed Courses); PLAN: Spanish (BA); LVL: Sr
Course Attributes: Capstone Course, Latin American Studies, West European Studies

SPAN 1304 - METHODS OF TEACHING SPANISH

Minimum Credits: 3
Maximum Credits: 3
A course designed for those who plan to teach Spanish. Main focus is on practical information of how best (method and technique) to teach the

language. Topics include: theory of learning, approaches, activities, dialogs and drills, the role of grammar, the lab, testing, vocabulary, and the like. Practice teaching, including videotaping.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 and 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (BA, BPH)] or [SPAN 0020 or 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (MN)]

SPAN 1305 - SPANISH APPLIED LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
A thorough analysis of the linguistic problems in teaching Spanish to speakers of English. Particular emphasis on problems of interference by transfer from the native to the target language, using contrastive analysis as a method of problem solving. Study of phonology and grammar, with attention also to certain techniques in foreign language teaching. Included is a brief survey of the teaching of Spanish in the United States and elsewhere.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0020 or 0120 AND 0025 or 0125 (MIN GRADE 'C' for Listed Courses) or Spanish Placement Test Score equal to 13.

SPAN 1306 - SPECIAL TOPICS IN APPLIED LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
The goal of this course is to further develop the oral proficiency of students through authentic materials including but not limited to interviews, movies, music, newspaper articles and role-playing. Emphasis on fluency and speaking skills, although reading and writing skills will not be ignored. We will review certain grammar points but communicative competence is not measured by grammatical competence alone. Pronunciation, comprehension skills, strategic competence such as paraphrasing skills, and an extensive active vocabulary are all equally important when it comes to becoming proficient in a foreign language. Students will often work in groups and pairs so it is imperative that they be willing to interact with one another and be tolerant of one another's opinions. The instructor will rate students' oral proficiency at the beginning and end of the semester based on the ACTFL speaking proficiency guidelines. These guidelines are used nation-wide as an assessment tool to identify an individual's level of speaking competence in a foreign language.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 and 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (BA, BPH)] or [SPAN 0020 or 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (MN)]

SPAN 1310 - LINGUISTIC SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course allows students to work on various linguistic topics in depth; these may be theoretical or applied in nature. Students are expected to do original research and to present it both orally in class and as a written research document. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 and 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (BA, BPH)] or [SPAN 0020 or 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (MN)]

SPAN 1312 - OVERVIEW OF SPANISH LINGUISTICS

Minimum Credits: 3
Maximum Credits: 3
This is a content course taught entirely in Spanish with the goal of developing students' competence beyond colloquial and formal registers toward an academic use of the language. It will examine various aspects of Hispanic linguistics such as phonology, phonetics, morphosyntax, semantics and pragmatics. Students will develop a basic of Hispanic linguistics in order to be able to critically evaluate other linguistic theories and studies in the future. Fields such as applied linguistics (both language acquisition and sociolinguistics) will be covered in order to observe the relationship between theory and current use of Spanish.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 or 0120] and [SPAN 0025 or 0125] (Min Grade 'C' for all listed courses)

SPAN 1315 - SPANISH FOR PROFESSIONAL COMMUNICATIN

Minimum Credits: 3
Maximum Credits: 3
This course will present a variety of formal communication-related topics throughout the Hispanic world and help students begin to develop their professional profile in Spanish. The main objective is to introduce students to the Hispanic professional environment through formal Spanish terminology and usage, cultural practices, and professional communication. This class will be conducted in a seminar format, with a strong focus on conversation and writing. Students will also learn about the geographical, political, demographic and economic realities of Hispanic countries. In order to develop intercultural competence, students will be invited to make connections and comparisons between the US and Hispanic world. Moreover, students will engage with invited speakers and job interviewers from Latin America
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0020/0120 AND 0025/0125 (MIN GRADE 'C' for Listed Courses)

SPAN 1320 - INTRODUCTION TO TRANSLATION

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to the theory, the basic processes, techniques and practice of English to Spanish translation and Spanish to English translation of a wide variety of materials. The students will learn how to approach the linguistic and cultural issues involved in the translation of general as well as specialized texts of various fields such as journalism, advertising, business, medicine, literature, government publications and legal documents, among others. In the process, the students will increase their vocabulary of the target language and further their understanding of the structures of both languages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or SPAN 0120) and (SPAN 0025 or 0125) (MIN GRADE 'C' FOR LISTED COURSES)

SPAN 1321 - BUSINESS SPANISH 1

Minimum Credits: 3
Maximum Credits: 3
This course is designed to acquaint students with the essential forms and documents utilized in the Spanish business world.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 and 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (BA, BPH)] or [SPAN 0020 or 0025 (MIN GRADE 'C' for Listed Courses) PLAN: Spanish (MN)]
Course Attributes: West European Studies

SPAN 1323 - MEDICAL SPANISH

Minimum Credits: 3
Maximum Credits: 3
This course is intended for translators in training who desire experience in translating the types of medical documents professional translators handle "on-the-job". Course emphasizes acquisition of practical translation skills, and introduces basic medical principles and terminology, as they are used in medical texts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [SPAN 0020 or 0120] and [SPAN 0025 or 0125] (Min Grade 'C' for all listed courses)

SPAN 1400 - SURVEY LATIN AMERICAN LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course surveys the development of Latin American literature from the Cronistas to the present. Taught in Spanish.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0050 or 1250 or 1260 or 1280 or 1400 or 1600; (MIN GRADE 'C' for all listed courses)
Course Attributes: Latin American Studies

SPAN 1403 - LATIN AMERICAN NARRATIVE

Minimum Credits: 3
Maximum Credits: 3
This course deals with the development of Latin American prose narrative as it moves from 19th century realism and naturalism in the direction of modernista and vanguardista innovations, culminating in the narrative of the boom and the post-boom. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)

SPAN 1404 - LATIN AMERICAN TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course deals with literary, linguistic or cultural topics, or a combination of these. Its primary emphasis is on developing an understanding of contemporary cultures in Latin America. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)
Course Attributes: Latin American Studies

SPAN 1405 - SEMINAR: LATIN AMERICAN LITERATURE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course studies various cultural and literary topics according to the needs and interests of the students. Its purpose is to allow students to do original research on their own on topics of interest in the field of Latin American literature and culture. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)
Course Attributes: Latin American Studies

SPAN 1406 - U.S. LATINO LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course will focus on U.S. Latino literature. While Mexican-Americans have roots in North America that go back to colonial times, the Latino explosion has happened mainly in the last thirty years, giving rise to new processes and forms of cultural expression, including an emerging literature that is neither a subset of U.S. Literature nor an ex tension of modern Latin American literature, though it has connections to both. To get an idea of what this literature involves and where it is going, we will look at some representative novels, poetry, memoirs, plays and films.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)

SPAN 1407 - U.S. LATINO FILM

Minimum Credits: 3
Maximum Credits: 3
The major purpose of the course consists of illustrating and analyzing the role of the audiovisual media film (fiction and documentary) and video (and television, to a certain degree) for an understanding of the socio-cultural and conceptual status that Latina/o identities have acquired in today's society. Thematically, the course will focus on themes of modernity vs. tradition in U.S. Latino culture. The course uses a selection of audiovisual materials which is fairly innovative in its variety. Chicano films and videos will constitute the major part of the material.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)
Course Attributes: Global Studies

SPAN 1413 - SHORT STORY IN SPANISH AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course is a survey of the short story in Spanish America in the twentieth and early twentieth century. Authors to be studied in a given year will include some of the following; Leopoldo Lugones, Horacio Quiroga, Maria Luisa Bombal, Jorge Luis Borges, Silvina Ocampo, Felisberto Hernandez, Juan Carlos Onetti, Juan Rulfo, Elena Garro, Augusto Roa Bastos, Gabriel Barcia Marquez, , Julio Cortazar, Juan Jose Saer, Marvel Moreno, Ricardo Piglia, and Mariana Enriquez. Particular attention will be paid to writers who are also theorists of the short story (Quiroga, Borges, Cortazar, Piglia among others) and to scholars of the short story genre in Spanish America. There will also be consideration of the genre of the novella (including distinctions in short story theory between the long and the short), with examples from Bombal, Jose Bianco, Slivina Ocampo, Felisberto Hernandez, Ricardo Piglia and others.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1414 - THEATRE AND PERFORMANCE IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course examines the use of performance by the State, by oppositional groups, and by theatre and performance practitioners, to solidify or challenge structures of power. It looks at specific example of how theatre an public spectacles have been used since the 1960s to control or contest the political stage.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SPAN 1417 - LATIN AMERICAN FILM & MEDIA

Minimum Credits: 3
Maximum Credits: 3
This course focuses on the study of Latin American film and media by both engaging in critical viewing/reading of Latin American film and media production, as well as an exploration of relevant topics and theoretical frameworks. We will engage with questions of film and representation, art and politics, and culture and economy.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1418 - VIOLENT VISIONS: REPRESENTATIONS/AESTHETICS OF VIOLENCE IN CONTEMPORARY LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course will explore the role of violence in contemporary Latin American cinema by examining both film media's representational capacity and its aesthetic composition or form. Departing from the contention that films not only create narratives, but also produce thought, we will focus on an analysis of Latin American films produced in the last twenty years, to interrogate whether violence can function as an aesthetic, theoretical and/or affective device to rethink the social, the political, and the economic. Are Latin American films merely faithful representations"of the sociopolitical and economic violence that characterizes the Latin American "reality" of today? Do manifestations of violence in Latin American cinema offer new ways of thinking about and processing sociopolitical and economic conflicts? Or is violence being commodified and reified as Latin American cultural difference in order to promote and brand Latin American cinema in the global market and circuit of international film festivals? We will address these questions by exploring the ways in which Latin America cinema is placed in a constitutive and disruptive relationship to the violent forces of the neoliberal state and globalization. These inquiries will be made in three inter-related ways. First, we will study several Latin American films from various nations and productions. Second, we will look at specific events and cases of violence with which these films engage, such as gender, racial and class oppression, military dictatorships and the police state, drug trafficking and neoliberal restructuring. Lastly, we will read critical texts by various key authors on theories of violence, film studies, and Latin American cultural studies.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or 0120) and (SPAN 0025 or 0125) and SPAN 1250

SPAN 1419 - DRUGS, MONEY AND VIOLENCE: NARCO-CULTURE IN LATIN AMERICAN FILM

Minimum Credits: 3
Maximum Credits: 3
This course explores the complex, multi-layered, and often contradictory world of transnational narcotics traffic particularly as it is configured in and through contemporary Latin American cinema. Departing from the contention that the relations between drug trafficking networks, governmental responses to the drug trade, drug production and consumption, are not clear and transparent as depicted in dominant discourses exemplified by the narrative of the War on Drugs, this course analyzes narco-culture not as a simplistic response centered merely on the idolization of drug lords or drug culture, but as a dynamic creative current that tries to make sense of the complexity and violence of the world of drugs. Why do official narratives of capitalist enterprise disavow the capitalist foundation of the drug trade? How are discourses of security and protection ironically embodied in violent militarized actions and neo-imperial ventures? How does the criminalization of certain cultural practices and symbols - particular languages, dress codes, music - relate to the racialization and sexualization of certain peoples and bodies? Moreover, how can we understand the (global) commercial success of narco-culture as exemplified by recent mainstream media and popular culture? In this course, we will address these questions by engaging in close reading/viewing of contemporary Latin American films that center on representations and (re)productions of narco-culture. These primary works will be examined in conjunction with secondary readings that discuss topics relevant to our analysis of narco-culture, such as globalization, neoliberal capitalism, immigration, femicides, cultural appropriation, and racial and gender construction.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1422 - MEXICAN LITERATURE, ARTS, AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course reviews the last hundred years of Mexican cultural history, from the 1910 Revolution to the present. Taking into consideration the meta concepts that define national culture:" the cosmic race","the post-Mexican condition" and "the labyrinth of solitude", and under the lens of indigenous, nationalist, feminist and postmodernist theories, this course examines several milestones of national culture. This analysis focus on the cultural programs of the post-revolutionary period (muralism), the rise of the Mexican cultural industry (radio, cinema, comics, telenovela), the transcendental moments of conflict (the 1968 Olympic Games, the implementation of the Free Trade Agreement and the rebellion of the Zapatistas in 1994) and transnational tendencies (the pachuco, the narcoculture). The objective of the course is not, however, to define Mexican national culture, but to analyze, problematize and unsettle the ideological conflicts and cultural struggles that contextualize the production and diffusion of the great works of the last century through critical approaches guided by such concepts as those of ideology, race, gender, nationalism, the border, and post-nationalism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or 0120) and (SPAN 0025 or 0125) and SPAN 1250

SPAN 1423 - SEXUAL DIVERSITY IN LATIN AMERICAN LITERATURE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course covers ways in which sexuality is constructed in Latin American cultural texts (novels, short fiction, poetry, printed media, theater, film and popular culture) from the late nineteenth to early twenty-first century.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 1250
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

SPAN 1426 - LITERATURE OF THE SOUTHERN CONE COUNTRIES

Minimum Credits: 3
Maximum Credits: 3
This course is a survey of the literature of the Southern Cone countries, Argentina, Chile, Uruguay and Paraguay, from the nineteenth century to the present. Issues to be examined will include debates about nation formation and nationalism, relations between indigenous peoples and European settler (including the massive waves of European migration in the period around 1900), the relations between literature and he press, questions of canon formation, and the literary production of minority communities (European and Asian immigrants, Afro-Latin Amercian communities, indigenous peoples, LGBTI communities) and questions of gender and sexuality. Writes to be studied in a given term will include some of hte

following: Domingo Faustino Sarmiento, Jose Hernandez, Alberto Blest Gana, Jose Enrique Rodo, Leopoldo Lugones, Horacio Quiroga, Delmira Agustini, Florencio Sanchez, Roberto Arlt, Maria Luisa Bombal, Jose Donoso, Jorge Luis Borges, Gabriela Mistral, Juan Carlos Onetti, Felisberto Hernandez, Augusto Roa Bastos, Silvian Ocampo, Idean Velarino, Ricardo Piglia, Dimela Eltit and Pedro Lemebel
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 1250
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

SPAN 1427 - TRANSATLANTIC HISPANIC LITERATURE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
The literature's of Latin American and Spain have been in dialogue, whether intentional or otherwise, since the first points of contact and subsequent colonization and independence. Reading cultural products side-by-side illuminates these dialogues and allows students to place these works of Latin America and Spain in their global context. In this course, we will analyze significant Spanish and Latin American cultural and literary texts, broadly defined to include visual art, performances, and music, to explore space, society, and culture through the perspectives of various authors and artists.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or 0120) and (SPAN 0025 or 0125) and SPAN 1250

SPAN 1432 - WRITING FEMINISM

Minimum Credits: 3
Maximum Credits: 3
This course attempts to examine writing and art produced by women. A writer from the Colony, as poet Juana Ines de la Cruz, or a character as Teresa in the film Retrato de Teresa, or painters as Frida Kahlo (Mexico) or Myrna Baez (Puerto Rico) are all important characters within a timeline, a context, and the struggle for voice and visibility. Ours is an intersectional approach to Patriarchy, violence, sexuality, race and art, which are the five topics of this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or 0120) and (SPAN 0025 or 0125) and SPAN 1250

SPAN 1433 - WOMEN'S NARRATIVES IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Addressing women's writing and its relation to the right of expression, we will explore several styles present in contemporary women's writing (short novels and short-stories), some of them parodic, ironic, performative, or gothic, fantastic, realistic and baroque. Some topics to be addressed are gender studies, environmental studies, erotism, violence and human rights. Regions to be covered are the Caribbean and the South Cone. Fantasy, Gothic, and Baroque trends and Environmental Dystopias will be the styles examined in recent and contemporary authorship within Latin America, and the Caribbean archipelago. Both works in Spanish and Translations into English of and short and long narratives from several women authors will give us a general idea of the agonistic search for a voice where rights and passions are defended within the right of expression of some of the most important women writers nowadays. Alejandra Pizarnik, Rosario FerrÃ©, MarÃa Luisa Bombal, Vanessa Vilches, Samantha Shweblin, Mariana Enriquez, Clarice Lispector, Diamela Eltit, Gabriela CabezÃ³n CÃ¡mara, and Marta Aponte will be some of the authors studied.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 1250

SPAN 1435 - POETICS OF BILINGUALISM

Minimum Credits: 3
Maximum Credits: 3
Concentrating on what is bilingualism, and after reviewing its historical and cultural parameters in Latin America, we will study the violent encounter between the Indigenous languages and the languages brought by the Conquistadores (Spanish, English, French, Portuguese), and its impact on the formation of the nation, class relations, race and language. This will be a non-chronological account of the cultural and linguistic genocides, encounters, shocks and invasions from the times of La Malinche, Sor Juana, and other authors to Latino Writing Today. Theories of Francine Massiello, Doris Sommer, and Juan Flores will be examined, as well as authors such as Sylvia Molloy, Octavio Paz, Esmeralda Santiago, Luis Rafael Sánchez, Guillermo Gómez Peña, Pedro Pietri, Dolores Prida Gloria Anzaldúa, and Lhasa di Sela, among others. We will explore questions regarding

bilingualism, language and nation formation, translation studies, border studies, and minority writing. Discussion on the importance of bilingualism in a globalized world, as well as issues conforming publication and expectations on Latino writing will also be addressed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1438 - AFRO-HISPANIC CULTURAL PRODUCTION: AFRO HISPANIC WRITERS

Minimum Credits: 3
Maximum Credits: 3
This course offers a survey of writing and other forms of cultural production in Spanish by and about Africans and Afro-descendants in the twentieth century (poetry, short stories, novel, visual media) in their national and historical context(s). The writers will be taken from Equatorial Guinea, a former Spanish colony in West Africa, the Caribbean and South America. The courseâs general objectives are to enable students to appreciate and to demonstrate knowledge of the historical circumstances governing black writing and the black presence in the Hispanic world in the twentieth century, and to appreciate their thematic concerns and specificities, as well as the importance of their contributions to literature and culture in the national and universal contexts. It is also the courseâs objective to enable students to appreciate the thematic range of this body of materials, especially its engagement with race, with nationalism, with gender, and with the colonial past.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or 0120) and (SPAN 0025 or 0125) and SPAN 1250

SPAN 1439 - QUEER MEXICO

Minimum Credits: 3
Maximum Credits: 3
From a queer theoretical perspective, as an extension of gender and sexuality studies, this course offers a panoramic view of cultural production in Mexico from 1901 to the present. As a point of departure, several milestones are presented in the sociocultural constructions of masculinity, femininity and sexuality and their respective transformations throughout the 20th century. Similarly, this course examines the themes, dynamics, trends and common sites of sexual diversity in contemporary Mexico. Incorporating a diversity of cultural texts (i.e. novels, essays, newspaper articles, videos, films, art, music, and performance.), this course centers thematically on the gender models that circulated before, during and after the 1910 Revolution, the debates about homosexuality during the decade of the 40s, 50s and 60s, the emergence of activist movement in favor of sexual diversity in the 70s, the cultural production of homosexual themes, the urban space in the development of sexually dissident practices, the HIV/AIDS pandemic, nightlife culture, sexual manifestations in the borderlands and in the indigenous communities of Oaxaca, lesbianism, transsexualism, the debate on queerness, the cultural symbols and practices of the LGBT community in Mexico. This course aims to develop critical thinking skills through the rigorous examination of the assumptions that fix, homogenize and perpetuate the traditional narratives that lead to a dichotomy of sexuality in contemporary Mexico.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or 0120) AND (SPAN 0025 or 0125)
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Diversity General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

SPAN 1441 - READING COLONIAL LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
In this course, students analyze significant Latin American literary texts, broadly defined to include visual art, performances, and music, to explore space, society, and culture through the perspectives of indigenous, mestizo, European, and creole authors of the colonial period, from the first European presence in the Americas in 1492 through the eighteenth century.Â Students will develop their skills and knowledge to read, analyze, write, and speak effecively in Spanish about colonial literature, situating their own arguments in relation to ongoing scholarly debates and a broader historical framework.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1442 - INDIOS CHINOS, INCA WITCHES, AFRICAN HEALERS, CRYPTO-JEWS, AND OLD CHRISTIANS: DIFFERENCES

Minimum Credits: 3
Maximum Credits: 3
Diversity has been a constant of human societies, and so have been the different ways in which people have made sense of it. Colonial Latin America

was no exception. After 1492 Indigenous Latin American polities progressively went from independent entities to subordinated units of the Portuguese and Spanish Empires, and large numbers of African and Asian peoples were uprooted and transported to Latin America. During this long, protracted process of transformation Western ideas about difference were put to the test and gave birth to unexpected questions. Was it the stars that made people different? Or was it that the sun was stronger in the tropics? Perhaps it was the mother's imagination, or the Devil messing with it? Were all people descendants of the same act of creation or had there been many? Were the varying degrees of masculinity at the roots of it all? And anyway, how fundamental were the differences? Could skin color be rubbed off? Was the soul the same color as the skin? Was the blood tainted? Would conversion to Christianity solve it all? If the colonizers' plural, often contradictory theories made simple answers difficult, the questions got even more complex as a result of the West's Others' adaptations and resistance. Native peoples of the Americas, Asians and Africans did not simply endure Western theories about difference, they also actively engaged them to build their own identity projects and social selves. At times, they used Western ideas to protect their polities. Aware of the many contradictions between them, Indigenous, Asian and African actors used one theory against the other and pretended to be the best example of a particular theory's results when it was convenient to them, like "playing Indian." At other times, they questioned Spanish and Portuguese classifications and advanced their own arguments. Yet at other times, they rejected Western racial policies flatly and argued that Europeans should go nativeâwhich they sometimes did, becoming Indigenous witches who joined forces with disguised Jews to subvert the colonial order of things. This course examines this constant process of change in its multiple manifestations as well as the different scholarly views of it. The materials go from European ideas about difference pre-1492 to the end of the colonial period in the 1800s, from Indian and Philippine slaves in Mexico City to Africans in Peru, Brazil, and Colombia, from Jews conspirators in the Andes to Spanish witches in Lima, from transvestites to Inquisitors, from slaves to saints, and from sugar mill owners to Inca activists. We also examine the diverse ways in which current scholars think about difference in colonial times. As it happens, there is no agreement today on the meaning of central concepts like "race" or "ethnicity"âperhaps because in colonial times there was no clear consensus either. The goal of the course is, therefore, not to arrive to a fast and sure answer, but to become familiar with the questions and problems that informed and continue to inform past and present conversations about racial, ethnic and religious difference and diversity.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1453 - AVANT GARDE MOVEMENTS IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
This course focuses on avant garde movements in Spanish American and Brazil, including creacionismo (Vincente Huidobro) ultraismo (Jorge Luis Borges, antropofagia (Oswald de Andrade and others), estridentismo (Manual Maples Arce and others), the Contemporaneos group (Xavier Villaurrutia, Salvador Novo and others), and various other groups. The core readings will be the manifestoes and other documents in the Jorge Schwartz anthology (Vanguardias latinoamericanas), Mihail Grunfeld's anthology of Latin American avant garde poerty and Hugo Verani's anthology of Latin American avant garde prose. Selected crirical writing on the avant garge (Burger, Poggioli and others) will also be considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0020 or 0120) and (SPAN 0025 or 0125) and SPAN 1250

SPAN 1455 - BORDER STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course is a comparative and relational examination of borders/boundaries/borderlands in the Americas, looking specifically at Latin American (im)migration to the US and (im)migration within Latin America. Starting with national/territorial borders, we move to explore the literal and figurative borders experienced by racialized immigrants, refugees and minoritized communities. Paying attention to the roles of gender, sexuality and racialization in shaping the experiences and life opportunities for migrant populations, we will focus on cultural texts (literature, film, visual culture, music etc.) and critiques from feminist, queer, indigenous, and people of color.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 1250
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

SPAN 1456 - LATIN AMERICAN SOCIAL MOVEMENTS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the concepts of resistance and social activism in Latin American: how social movements and activism are organized, exercised, enacted, and contested. From everyday forms of resistance to organized movements, we will examine some concrete historical and cultural situations in relation to major topics: the legacy of past revolutions, human rights and memory, Neoliberalism and globalization, environmental issues, women and gay activism, and Hispanic immigration to the US. Through critical and fictional texts, films and documentaries, music and visual arts, students will gain a multidimensional understanding of contemporary Hispanic issues and different ways and

instances of social resistance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1458 - PLANTS, SPIRITUALITY AND HEALING IN LATIN AMERICAN CULTURE

Minimum Credits: 3
Maximum Credits: 3
The basic premise of this course is that literature and cultural expressions in general provide a robust articulation of imaginary, symbolic, philosophical, ethical, and spiritual aspects of health and healing. We will examine academic articles, essays, poems, narratives, films, videos and paintings that explore the relationship between plants, spirituality an healing as constructed by popular, indigenous and Afrodescendant traditions in Latin America. These expressions offer insightful approaches that contribute to an ongoing critical discussion concerning these topics. Given that our purpose is to address artistic and philosophical aspects that relate to peoples' conceptions about spirituality, health and healing, which in-of-themselves constitute an essential part of any comprehensive approach to health in general, this course does not specifically address the empirical therapeutic value (of lack of) of specific practices. Section I will discuss current global and national contexts of traditional medicine. Section II will provide an overview of significant issues in Latin American ethnobotany. Section III will analyze the fundamental metaphysics and ethics of Amerindian myth and ritual. Section IV will examine literary works and films that provide critical insights to contemporary philosophies of spirituality and healing, and, as the arts usually do, connect these insights to a sundry array of contemporary issues, opening up unexpected vistas. Geo-cultural matrices of examined works include indigenous and Afrodescendant societies in Mexico, Central America, the Andes, Amazonia, and he Caribbean (Haiti-Dominican Republic), as well as urban societies in Bolivia, Colombia, and Argentina.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 1250

SPAN 1459 - MAPPING THE FEMALE BODY: A CULTURAL APPROACH TO WOMEN'S HEALTH IN THE HISPANIC WORLD

Minimum Credits: 3
Maximum Credits: 3
This course is an overview of the female body and women's health in Latin America and Spain from a cultural perspective, which addresses related social implications and health rights. Students will analyze women's health issues through critical interpretation of literary texts, poems, movies, documentaries, and photography in conjunction with media perspectives and theoretical approaches. Students will be exposed to topics across four overarching themes: adolescence, reproduction, illness, and aging, with subtopics such as sexuality, pregnancy, infertility, breast cancer, menopause, eating disorders, among others. Students will be expected to engage in critical discussions, and will be given the opportunity to connect and contrast these issues with their own cultural experience. The course will be student-centered, with mandatory participation. Classes will employ a discussion format led by the instructor.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1463 - BORGES SHORT STORIES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: DSAS Geographic Region General Ed. Requirement, DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., Writing Requirement Course

SPAN 1464 - NICHOLAS GUILLEN: RACE, WRITING, AND REVOLUTION

Minimum Credits: 3
Maximum Credits: 3
This course studies selections from fifty years of writing by Cuba's National Poet, Nicolás Guillén, whose work offers us an important window into pre-Revolutionary Cuba as a highly racialized sugar and tourist island, which transitions to become the first Socialist regime in the hemisphere.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req.

SPAN 1470 - THE INCAS: ANDEAN INDIGENOUS PEOPLES AND SPANISH COLONIAL RULE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req.

SPAN 1472 - MEXICAN LITERATURE, ARTS AND CULTURE: UNSETTLING MEXICAN NATIONALISMS

Minimum Credits: 3
Maximum Credits: 3
This course reviews the last hundred years of Mexican cultural history, from the 1910 Revolution to the present. Taking into consideration the meta concepts that define national culture: "the cosmic race", "the post-Mexican condition" and the "labyrinth of solitude", and under the lends of indigenous, nationlist, feminist and postmodernist theories, this course examines several milestones of national culture. This analysis focuses on the cultural programs of he post-revolutionary period (muralism), the rise of the Mexican cultural industry (radio, cinema, comics, telenovela), the transcendental moments of conflict (the 1968 Olympic Games, the implementation of the Free Trade Agreement, and the rebellion of the Zapatistas in 1994) and transnational tendencies (the pachuco, the narcoculture). The objective of this course is not, however, to define Mexican national culture, but to analyze, problematize and unsettle the ideological conflict and cultural struggles that contextualize the production and diffusion of the great works of the last century through critical approaches guided by such concepts as those of ideology, race, gender, nationalism, the border, and post nationalism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1600 - SURVEY OF SPANISH LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course surveys the development of Spanish literature from the twelfth century to the present. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SPAN 0055 (MIN GRADE 'C'); PLAN: Spanish (BA,BPH) or PREQ: SPAN 0050 (MIN GRADE 'C'); PLAN: Spanish (MN)

SPAN 1601 - PENINSULAR LITERATURE

Minimum Credits: 3
Maximum Credits: 3
This course studies the various stages of development of peninsular culture and literature in the 20th century, ranging from the 40-year period of the Franco dictatorship to the relatively recent transition to democracy. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: [(SPAN 1400 or 1600) and 0050 (MIN GRADE 'C' for Listed Courses); PLAN: Spanish (BA, BPH)] or [SPAN 0050 (MIN GRADE 'C') and PLAN: Spanish (MN)]
Course Attributes: West European Studies

SPAN 1603 - PENINSULAR TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course looks at various cultural and literary topics according to the needs and interests of the students. Its major purpose is to allow students to do research on topics of interest in the field of peninsular literature and culture. Taught in Spanish.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)
Course Attributes: Latin American Studies, West European Studies

SPAN 1700 - COMPARATIVE HISPANIC TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course looks at various cultural and literary topics according to the needs and interests of the students. Its major purpose is to allow students to do research on topics of interest in the field of Latin American and peninsular literature and culture. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)
Course Attributes: Latin American Studies

SPAN 1705 - SEMINAR: HISPANIC LITERATURE AND CULTURE

Minimum Credits: 3
Maximum Credits: 3
This course studies various cultural and literary topics according to the needs and interests of the students. Its purpose is to allow students to do research on topics of interest in the field of Hispanic literature and culture. Taught in Spanish.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)
Course Attributes: Latin American Studies

SPAN 1707 - AFRCN PRESEN LAT AMERN LIT/CULT

Minimum Credits: 3
Maximum Credits: 3
This course is a chronological and topical introduction to afro-Latin American culture, making use of literary texts, historical documents, feature films, etc. It aims at providing students with a concrete frame of reference for the African presence in Latin America.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

SPAN 1801 - DON QUIJOTE AND THE NOVEL

Minimum Credits: 3
Maximum Credits: 3
This course deals in depth with Cervantes' Don Quijote as the first modern novel and its profound influence on European literatures. Taught in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)

SPAN 1805 - CONTEMPORARY HISPANIC LITERATURE AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
This course deals with contemporary Spanish and Latin American societies as revealed in short stories, novels and poetry in an effort to ascertain the cultural values and concepts of these societies. Taught in English.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SPAN 1806 - CAPSTONE SEMINAR

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: (SPAN 1260 or 1280 or 1400 or 1600 or 0050 or 1250 (MIN GRADE 'C' for listed courses); PLAN: Spanish (BA, BPH, MN); LVL: Senior
Course Attributes: Capstone Course

SPAN 1890 - THE NEW NOVEL IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
Lectures, textual analysis and class discussions in English on the major novelists of the Latin American "boom" of the sixties, with reference to techniques of literary analysis and the social, ideological and cultural background of the works in question.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: (SPAN 0050 or 1250); PLAN: Spanish (BA, BPH, MN); (MIN GRADE 'C' for all courses listed)

SPAN 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
This course allows students to work in-depth in areas of their choice; evaluation is by examination or by the production of a term paper.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

SPAN 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 6
This course allows students to work in depth in areas of their choice, with the approval and supervision of a faculty member, who meets regularly with the student.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: West European Studies

SPAN 1906 - SPANISH INTERNSHIP FOR CREDIT

Minimum Credits: 1
Maximum Credits: 6
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

Statistics

STAT 0200 - BASIC APPLIED STATISTICS

Minimum Credits: 4
Maximum Credits: 4
This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression the analysis of variance, and contingency tables. Students will learn how to use a statistical computer package.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Statistics GE. Req.

STAT 0800 - STATISTICS IN THE MODERN WORLD

Minimum Credits: 3
Maximum Credits: 3
The course introduces statistical reasoning to a diverse audience. The main goal is the understanding of some basic statistical principles so that the student can understand research reports involving statistics and applications of statistics reported in the media. Statistical reasoning will be taught through the use of examples. An important part of the course will be a nontechnical discussion of controlled and randomized experiments. The subject matter will emphasize examples from the health and social sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement

STAT 1000 - APPLIED STATISTICAL METHODS

Minimum Credits: 4
Maximum Credits: 4
This course is an intensive introduction to statistical methods. It is designed for students who want to do data analysis and to study further ideas in applied statistics beyond this course. The topics covered include descriptive statistics, elementary probability, random sampling, controlled experiments, hypothesis testing, regression and the analysis of variance. Emphasis will be placed on the statistical reasoning underlying the methods. Students will also become proficient at the use of a statistical software package.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Quant.-Formal Reason General Ed. Requirement, SCI Quantitative: Statistics GE. Req.

STAT 1050 - DATA JAM: USING BIG DATA FOR COMMUNITY GOOD

Minimum Credits: 3
Maximum Credits: 3
This is a course that introduces students to the various aspects of big data science --- data visualization and analytics, engaging communities in using big data, and the ethics and equitable access to big data. The course will be co-taught by faculty with expertise in these various areas. Big Data Science is becoming increasingly relevant as big data is everywhere and its use is impacting almost every aspect of modern life. This is a "hands-on" learning experience as university students taking the course will also serve as mentors for teams of high school students in a local big data competition, The Pittsburgh DataJam (see http://pghdataworks.org to learn about the Pittsburgh DataJam).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SU3 Elective Basis

STAT 1061 - DATA SCIENCE FOUNDATIONS

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide a general introduction to the rapidly growing field of data science. The course will be very hands-on with students actively carrying out the techniques and procedures being taught on real datasets in order to foster the ability to reason with data. As part of this process, students will be taught the basics of programming (coding) in R and these skills will be reinforced through weekly lab sessions. In developing the core concepts, students will also be exposed to ancillary topics such as data ethics, simulation basics, and best practices in programming. No previous programming experience nor background in statistics will be assumed.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

STAT 1100 - STATISTICS AND PROBABILITY FOR BUSINESS MANAGEMENT

Minimum Credits: 4
Maximum Credits: 4
This is a one-term introduction to statistics and probability. Both modeling and data analysis will be emphasized. Various probability models for discrete and continuous variables will be analyzed. Inferential, descriptive and data analysis techniques will be covered with examples from management. A statistical package will be introduced and used to conduct data analyses.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0120 or MATH 0126 or MATH 0220 or MATH 0235
Course Attributes: SCI Quantitative: Statistics GE. Req.

STAT 1151 - INTRODUCTION TO PROBABILITY

Minimum Credits: 3
Maximum Credits: 3
This course presents at both a theoretical and applied level the basic probability concepts required for statistical inference. Topics include set theory and basic probability, independence and Bayes' theorem, discrete random variables and their distributions--Bernoulli, Binomial, Poisson, and geometric, continuous random variables and their distributions--uniform, exponential, gamma, beta, and normal, transformation of random variables, moment and moment generating functions, multivariate discrete distribution, marginal and conditional distribution and independent variables.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: MATH 0230 or 0235 or 0240 or 0245
Course Attributes: SCI Quantitative: Statistics GE. Req.

STAT 1152 - INTRODUCTION TO MATHEMATICAL STATISTICS

Minimum Credits: 3
Maximum Credits: 3
This course is continued from STAT 1151, Introduction to Probability, and brings together the elementary concepts of statistical inference, which are essential for advanced statistical methods. A brief review of probability theory will be provided at the beginning. Topics include functions of random variables; sampling distributions and order statistics; methods of point and interval estimation for variances and differences in two means and proportions; properties of estimators and their applications; theory and applications of hypothesis testing including the Neyman-Pearson lemma, power function of a test, and likelihood ratio tests; regression; and analysis of variance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1151 or MATH 1119
Course Attributes: SCI Quantitative: Statistics GE. Req.

STAT 1201 - APPLIED NONPARAMETRIC STATISTICS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course will be to prepare students to use standard nonparametric tests for problems that frequently occur in applications. The Wilcoxon, Fisher (sign), Ansari-Bradley, Miller (jackknife), Kruskal-Wallis, Kendall, and Kolmogorov-Smirnov tests will be discussed. Minitab subroutines will be used to facilitate computation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or 1000 or 1100 or 1152; MIN GRADE: STAT 0200 B-

STAT 1211 - APPLIED CATEGORICAL DATA ANLYSIS

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to provide contingency table techniques for research workers in the social sciences, medical sciences and other areas where it is necessary to investigate relationships between areas where it is necessary to investigate relationships between qualitative variables. The course deals with the chi-square test and standard 2x2 and RXC contingency tables, as well as log linear and other special types of contingency tables analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or 1000 or 1100 or 1152; MIN GRADE: STAT 0200 B-

STAT 1221 - APPLIED REGRESSION

Minimum Credits: 3
Maximum Credits: 3
This course covers simple linear regression (one variable) and one way analysis of variance followed by more complicated regression models. More complex ANOVA models are treated if time permits. Some computer applications will usually be considered.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or 1000 or 1100 or 1152; MIN GRADE: B-
Course Attributes: Capstone Course

STAT 1223 - APPLIED REGRESSION WRITING COMPONENT

Minimum Credits: 1
Maximum Credits: 1
This course satisfies the writing course requirement for statistics majors and must be taken in conjunction with STAT 1221 applied regression.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or 1000 or 1100 or 1152; CREQ: STAT 1221; MIN GRADE: STAT 0200 B-; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

STAT 1241 - APPLIED SAMPLING

Minimum Credits: 3
Maximum Credits: 3
This course considers basic applied principles and approaches for conducting a sample survey. The following will be discussed: how to design a survey, how to analyze a survey with attention paid to different types of survey techniques and corresponding statistical methods. The course will provide survey skills for the social sciences, psychology, economics, marketing and management, and health sciences.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: STAT 0200 or 1000 or 1100 or 1152; MIN GRADE: STAT 0200 B-

STAT 1251 - STATISTICAL QUALITY CONTROL

Minimum Credits: 3
Maximum Credits: 3
This course teaches students to design valid statistical experiments and to analyze them. Among the designs considered are completely randomized designs, randomized block designs, Latin lemmas, factorial designs, and complete block designs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or 1000 or 1100 or 1152; MIN GRADE: STAT 0200 B-

STAT 1251 - STATISTICAL QUALITY CONTROL

Minimum Credits: 3
Maximum Credits: 3
This course is involved with statistical methods for quality and process control. It is intended for all students who will use statistics in an industrial setting. Introductory topics include probability models and statistical estimation for quality. The main focus will be on control charts and tolerances. Acceptance sampling will also be discussed. A final but quite important topic will be Taguchi methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or 1000 or 1100 or 1152; MIN GRADE: STAT 0200 B-

STAT 1261 - PRINCIPLES OF DATA SCIENCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: Letter Grade

STAT 1291 - TOPICS APPLIED STATISTICS 1

Minimum Credits: 3
Maximum Credits: 3
Various topics concerning the applications of statistics will be taught on an irregular basis depending on faculty interests and students' needs. Example of possible topics include re-sampling techniques in statistics; statistical graphics; cluster analysis; and classification methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

STAT 1293 - TOPICS IN APPLIED STATISTICS 2

Minimum Credits: 3
Maximum Credits: 3
Various topics concerning the applications of statistics will be taught on an irregular basis depending on faculty interests and students' needs. Example of possible topics include re-sampling techniques in statistics; statistical graphics; cluster analysis; and classification methods.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 0200 or STAT 1000 or STAT 1100

STAT 1301 - STATISTICAL PACKAGES

Minimum Credits: 3
Maximum Credits: 3
This course will cover a variety of topics concerning computing and statistics. Basic statistical analysis packages such as BMPD, SPSS, Minitab, and IMSL will be discussed and compared. Other computational issues that will be discussed include simulation, graphics, elementary database management, and certain stand-alone statistical programs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1221

STAT 1311 - APPLIED MULTIVARIATE ANALYSIS

Minimum Credits: 3
Maximum Credits: 3
We start with the basic concepts of regression and correlation. After developing the necessary linear algebra, we will study the multivariate normal and then go on to do one or more of the following: cluster analysis, discriminant analysis, directional data, and factor analysis. We will make use of the Minitab and BMDP computer packages.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1221

STAT 1321 - APPLIED TIME SERIES

Minimum Credits: 3
Maximum Credits: 3
The objective of the course is to present at the elementary level, a unified and reasonably complete exposition of statistical methods used in time series analysis. Serious consideration is given to both time and frequency domain approaches. Real data from a number of subject fields will be analyzed as they occur in the exposition.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1151 and (STAT 1221 or ECON 1150)

STAT 1331 - FINANCIAL ECONOMETRICS

Minimum Credits: 3
Maximum Credits: 3
This course will provide a comprehensive and systematic account of financial econometric models and their applications to modeling and prediction of financial time series data, focusing on asset returns. Most of the emphasis is on applied time series modeling and forecasting. Students at the end of the course will have a working knowledge of financial time series data and gain expertise in statistical software to conduct the analyses.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ECON 1150 or STAT 1221

STAT 1361 - STATISTICAL LEARNING AND DATA SCIENCE

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide a broad introduction to the field of data science and to expose students to many of the statistical tools most commonly used by modern data scientists. We will explore a wide variety of models and algorithms in a data-driven fashion. Topics will include modeling techniques ranging from classic statistical modeling (e.g. linear and logistic regression) to modern statistical learning (e.g. regularization and lasso)to fundamental machine learning (e.g. random forests and support vector machines). Particular attention will be given to the sorts of scientific questions that can be asked and answered within the different frameworks. Students will have the opportunity to utilize modern, interesting datasets to both provide data-driven analytical solutions and also to formally assess the uncertainty in making such determinations. The R language will be used extensively for statistical computing. Some prior knowledge or experience with R or related programming languages is helpful but not essential
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1261 or STAT 1291 or (STAT 1221 and Knowledge of R); PLAN: Statistics or Statistics-Econ

STAT 1631 - INTERMEDIATE PROBABILITY

Minimum Credits: 3
Maximum Credits: 3
This course is the first half of a two term sequence in mathematical statistics intended for undergraduate students and graduate applied statistics majors. Topics to be covered include probability concepts, random variable, discrete and continuous variables, joint distributions, functions of random variables, and some sampling distributions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1151 and MATH 0240
Course Attributes: Capstone Course

STAT 1632 - INTERMEDIATE MATHEMATICAL STATISTICAL

Minimum Credits: 3
Maximum Credits: 3
This course is the second half of a two term course. Topics to be covered include estimation, inference, linear models, and an introduction to Bayesian estimation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1631 and MATH 0240
Course Attributes: Capstone Course

STAT 1651 - INTRODUCTION TO BAYESIAN STATISTICS

Minimum Credits: 3
Maximum Credits: 3
This course will give an introduction to Bayesian statistics. Topics to be covered include prior and posterior distributions, multi-level models, model checking and selection, stochastic simulation by Markov Chain Monte Carlo.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1151 OR 1631, STAT 1152 OR 1632, STAT 1221 Recommended STAT 1311.

STAT 1731 - STOCHASTIC PROCESSES

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to stochastic processes and its applications. The major topics are Markov chains, Poisson processes, Brownian motion, and branching processes.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1151 or MATH 1119

STAT 1741 - APPLIED PROBABILITY THEORY

Minimum Credits: 3
Maximum Credits: 3
The course will begin with an introduction to conditional probability. Topics to be covered include the Poisson process, queueing processes, renewal processes, and reliability theory.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: STAT 1151 or 1631

STAT 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
Under faculty supervision the student participates in a statistics project.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: H/S/U Basis
Course Attributes: Capstone Course

STAT 1902 - DIRECTED STUDY

Minimum Credits: 1
Maximum Credits: 9
With approval from an instructor, the student will participate in a program of directed study in statistics or probability.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

STAT 2131 - APPLIED STATISTICAL METHODS 1

Minimum Credits: 3
Maximum Credits: 3
This introductory graduate level course on applied statistics covers a wide variety of problems. We begin with simple data description and go on to standard estimation and testing problems. We then study various types of linear models. We make extensive use of the computer; the student will learn BMDP and Minitab.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC

STAT 2132 - APPLIED STATISTICAL METHODS 2

Minimum Credits: 3
Maximum Credits: 3
This course is a continuation of STAT 2131.
Academic Career: Graduate
Course Component: Lecture

Grade Component: Grad LG/SNC
Course Requirements: PREQ: STAT 2131

STAT 2381 - SUPERVISED STATISTICAL CONSULTING

Minimum Credits: 1
Maximum Credits: 6
In this course students will consult with clients in the consulting center. The consulting will be under the supervision of experienced consultants. Students will be taught how to provide statistical methods in conjunction with real problems and how to analyze and report the results.
Academic Career: Graduate
Course Component: Lecture
Grade Component: Grad LG/SNC
Course Requirements: PREQ: STAT 2132

Strategic Planning & Policy

BUSSPP 0020 - MANAGING COMPLEX ENVIRONMENTS

Minimum Credits: 3
Maximum Credits: 3
This 3-credit course introduces students to managing large firms in complex and rapidly changing environments. Students examine what managers do when faced with incomplete, noisy, and often inconsistent information about competitive forces, given (a) the firm's resources, capabilities, and constraints; (b) the effects of law, regulation, culture, and ethics; (c) the claims of various stakeholder constituencies, (d) industry structure and competition, (e) firm-level governance, and (f) market forces. This requires attention to the basic concepts, vocabulary, tools, and techniques of business and to the complex interrelations among the multiple dimensions of firm performance. The optional project will provide additional opportunity to develop several practical business skills, such as teamwork, the means of acquiring and using standard business and industry data, and fact-based reporting.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors
Course Attributes: Global Studies

BUSSPP 0021 - MANAGING IN COMPLEX ENVIRONMENTS HONORS +1

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Attributes: University Honors Course

BUSSPP 0036 - MCE+3 INT'L FIELD PROJECT - GERMANY

Minimum Credits: 3
Maximum Credits: 3
Provides students with the opportunity to apply concepts and tools acquired in BUSSPP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-U.S. environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environment and practices abroad are compared to those in the U.S. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in Germany under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted for College of Business Administration
Course Attributes: Pitt Class

BUSSPP 0037 - MCE+3: INTERNATIONAL FIELD PROJECT - COSTA RICA

Minimum Credits: 3
Maximum Credits: 3

Provides students with the opportunity to apply concepts and tools acquired in BUSSUP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-us environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environment and practices abroad are compared to those in the US. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in Chile under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted for College of Business Administration
Course Attributes: Latin American Studies, Pitt Class

BUSSPP 0038 - MCE+3: INTERNATIONAL FIELD PROJECT - CHINA

Minimum Credits: 3
Maximum Credits: 3
Provides students with the opportunity to apply concepts and tools acquired in BUSSPP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-US environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environments and practices abroad are compared to those in the US. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in China under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted for College of Business Administration
Course Attributes: Pitt Class

BUSSPP 0041 - MCE+3 INTERNATIONAL FIELD PROJECT - VIETNAM

Minimum Credits: 3
Maximum Credits: 3
Provides students with the opportunity to apply concepts and tools acquired in BUSSPP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-U.S. environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environment and practices abroad are compared to those in the U.S. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in Vietnam under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted for College of Business Administration
Course Attributes: Pitt Class

BUSSPP 0042 - MCE+3 INT'L FIELD PROJECT- ITALY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: Restricted for College of Business Administration

BUSSPP 0043 - MCE +3: INTERNATIONAL FIELD PROJECT - IRELAND

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 0043IS - MCE +3: INTERNATIONAL FIELD PROJECT- IRELAND - IN STATE

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 0043OS - MCE +3: INTERNATIONAL FIELD PROJECT - IRELAND - OUT OF STATE

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 0044 - PITT BUSINESS GLOBAL HONORS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 0044IS - WOODCOCK GLOBAL HONORS FELLOWSHIP - IN STATE

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 0044OS - WOODCOCK GLOBAL HONORS FELLOWSHIP - OUT OF STATE

Minimum Credits: 0
Maximum Credits: 0
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 0047 - PLUS3 PROGRAM IN ECUADOR

Minimum Credits: 3
Maximum Credits: 3
Provides students with the opportunity to apply concepts and tools acquired in BUSSPP 0020 managing in complex environments and new concepts and tools to the study of firms in a non-U.S. environment. Students work in teams with engineering students on research projects that are linked to specific firms and industries. Business environment and practices abroad are compared to those in the U.S. The trip abroad includes company visits, lectures, and cultural excursions during a two-week study period in Ecuador under the guidance of a faculty member.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 1080 - STRATEGIC MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Focuses on corporate and divisional policy formulation and implementation. Knowledge and techniques learned in earlier courses will be applied in an integrated fashion to the process of strategic decision-making and organizational change. Among topics considered in the course will be relationships of organizations to their environments, hierarchy of organizational objectives, structured as well as informal approaches to strategic planning, integration of business functions, organizational structure, and policy implementation and evaluation. Notable devotion to firms competitive dynamics.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PROG: College of Business Admin; LVL: Jr, Sr

BUSSPP 1740 - GLOBAL STRATEGY AND COMPETITIVE ADVANTAGE

Minimum Credits: 3
Maximum Credits: 3
This course explores the opportunities and challenges of global business in the 21st century. The discussions and exercises are designed to reveal the nuanced nature of competing globally, emphasizing both the increasing openness of borders and the continuing differences between countries. The course will employ case study analysis and discussion, along with a set of readings that are drawn from both academic and practitioner sources. An individual research project that involves identifying and researching a global business topic of interest to you will be a key part of the course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSSPP 1080 (MIN GRAD 'C'); PLAN: Global Management (BSBA)

BUSSPP 1745 - PROJECTS IN GLOBAL MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
The student will work with a real-world client and problem. Each project is different, and will provide the opportunity for a team of students to apply various conceptual and analytic skills taught in the major and in CBA, and to report to the client the results of these analyses. Each project will have the common element of a global or cross border dimension. The client will provide a problem it deems important and a manager to work with the student team. Each team will have a faculty advisor. Most students will take this course in one of their final two terms of study.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PLAN: Global Management(BSBA); LVL: Sr

BUSSPP 1750 - COMMERCIALIZING NEW TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course covers theory, conceptual frameworks, and tools used to formulate strategies for commercializing new technologies. The analytical frameworks cover elements of commercialization strategy that are equally critical to start-ups and to corporate technology ventures. In addition, we discuss some of the key challenges that differ for start-ups versus established firms. The primary deliverable in the course is a professional quality project which evaluates the commercialization alternatives for an emerging technology. Your project team will be paired with a local inventor, unless you prefer to evaluate a technology of special interest to your team. Experienced entrepreneurs and expects in financing new technology ventures will also address the class.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSPP 1790 - GLOBAL MANGEMENT INTERNSHIP

Minimum Credits: 1
Maximum Credits: 3
The strategic management internship provides business credit for project assignments that augment a professional strategic management work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit

BUSSPP 1795 - GLOBAL MANAGEMENT INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
An independent study course for students desiring to pursue in greater depth a specific set of strategic management issues or problems to which they have been introduced in other strategic management courses. The course involves directed reading and research under the guidance of a full-time faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

BUSSPP 1800 - STRATEGIC MANAGEMENT OF CRITICAL WATER RESOURCES

Minimum Credits: 3
Maximum Credits: 3
This transdisciplinary course is intended to help students develop critical thinking skills in fraught socio-political environments, and gain a command of analytical techniques that support planning and strategic decision making in contexts of great complexity and extreme uncertainty. The course is one of a cluster of three courses, the development of which is funded by the NEH. The course is supported by the intellectual and administrative resources of the University of Pittsburgh's Center for Russian and East European Studies (REES) and Asian Studies Center (ASC), in addition to the resources of the Katz Graduate School of Business/College of Business Administration and the Swanson School of Engineering. The History and Political Science Departments have also been intensely involved in the design and development of the course. Like the two other courses in the cluster funded by NEH, this course, while designed to stand alone, is linked with the two other courses by the common focus on the issue of water resources and on the countries of Central Asia. There is a natural progression to these three courses, with this course being the final one in the sequence. The key content of the two preceding courses, which focus on historical and political science perspectives are summarized in the early sessions of this course. Understanding the challenge of scarce water resources, which poses an existential threat to individuals, industries, communities, countries and indeed to humanity, will be one of the three themes of the course. Approaches adopted in other countries to respond to water scarcity will be critically examined. The second theme is understanding the socio-political and economic context of Central Asian countries with the primary focus being on Kazakhstan. The third theme, drawing from the other two will frame the challenge as a "wicked problem" which is not amenable to resolution by traditional problem-solving techniques. Analytical and planning techniques that are designed to address wicked problems will be described. Teams of students will employ these techniques to develop strategies for Kazakhstan's issues with water.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Studio Arts

SA 0110 - VISUAL THINKING

Minimum Credits: 3
Maximum Credits: 3
Visual Thinking offers an introduction and insight into the process and practice of creating visual art. The subject is explored by making images supported by lectures, discussions, and critiques. Students are introduced to the dynamics of composition, relationships of form and content, principles of color, visual analysis, and creative problem-solving. The course also seeks to provide some experience with a variety of media, develop skills in observation and technique, and encourage personal engagement in solving visual problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

SA 0120 - PAINTING STUDIO 1

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to oil painting that emphasizes color mixing, painting techniques, and composition. The purpose of the course is to promote sensitivity to color interaction, advance technical and compositional skills, and provide a basis for creative growth and expression.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

SA 0130 - DRAWING STUDIO 1

Minimum Credits: 3
Maximum Credits: 3
This course provides a comprehensive introduction to observational drawing. The coursework follows a sequence of exercises in various media that introduce basic drawing skills, techniques, and composition through observation and analysis of natural and manufactured forms. The course culminates with an introduction to the human figure.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

SA 0140 - SCULPTURE STUDIO 1

Minimum Credits: 3
Maximum Credits: 3
This hands-on course is an introduction to the practice of sculpture in contemporary and historical context. Using clay, plaster, wire, and cardboard, projects address material and technical processes as well as expressive, conceptual, and critical concerns.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

SA 0170 - DIGITAL STUDIO: CREATIVE CODING

Minimum Credits: 3
Maximum Credits: 3
This studio course is designed to be an introduction to the fundamentals of coding and digital circuits with a focus placed specifically on creative application (visual arts, sound/music, theater). In much the same way that introductory studio arts courses such as painting and sculpture are designed to explore materials, processes, tools and techniques, this course will take a parallel approach to technology as a medium. With a focus on digital systems of hardware and software, we will take a hands on approach to understand, explore and experiment with the core fundamentals of digital tools, materials, processes and ideas. As a grounding context for this course, we will look at the early artistic experiments on mainframe computers, which set the stage for the integrations of media and technology into contemporary creative practice (examples will cover visual arts, music, theater, poetry and others). No prior experience with programming, electronic circuits, or art is required or expected. We will work with the Arduino open source microcontroller platform.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

SA 0180 - DIGITAL STUDIO: PHOTOGRAPHY 1

Minimum Credits: 3
Maximum Credits: 3
Digital Studio:Photography introduces students to the technical, conceptual, and expressive potential of digital photography as an art form. Emphasis will be placed on creative use of digital cameras and software to conceptualize and translate ideas into meaningful images. Projects will be assigned in order to advance technical skills and develop new insights and approaches to image making. Students will begin to develop an individual voice as an artist by exploring and questioning the use of photography in their work; giving special attention to its conceptual and historical underpinnings, and its material form.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

SA 1220 - PAINTING STUDIO 2

Minimum Credits: 3
Maximum Credits: 3
This course is a comprehensive exploration of painting techniques and concepts designed to expand awareness of the craft of painting and expose students to issues relevant to contemporary painting. Students have the option to work with either oil or acrylic paints. The course concludes with the development of a self-directed painting project.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0120 and 0130

SA 1230 - DRAWING STUDIO 2

Minimum Credits: 3
Maximum Credits: 3
Drawing Studio 2 builds on the knowledge, skills and ideas practiced in Drawing Studio 1 while introducing more advanced approaches to developing content and style in drawing. The coursework therefore is roughly divided between continued practice and development of essential aspects of drawing - such as mark, tone structure, light, space, form, composition and perspective - and assignments designed to spark student explorations of the conceptual and communicative possibilities of drawing. Students will continue to develop observational drawing skills including figure drawing during class meetings; projects will be concerned with technical and formal aspects of drawing while emphasizing ideas and expression. The class will include a diverse range of examples of drawing from art historical through contemporary practices.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110 and 0130

SA 1240 - SCULPTURE STUDIO 2

Minimum Credits: 3
Maximum Credits: 3
A continuation of SA 0140, this course explores in greater depth the relationship between material, technique, process, and content in sculpture. Through expanded projects in plaster, wood, and metal, students deepen their experience and develop new skills, while interpreting assignments independently.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110 and 0140

SA 1260 - PRINT STUDIO: INTAGLIO

Minimum Credits: 3
Maximum Credits: 3
Intaglio printmaking is a diverse process, offering artists a variety of approaches to create marks, experiment and communicate. This course focuses on making intaglio prints from copper plates. Basic intaglio printmaking techniques are explored through the use of dry point, hard ground line etching, and aquatint. Advanced techniques are explored as the semester progresses. Experimentation is encouraged while developing techniques as well as researching printmaking as a tool to challenge studio practice and content.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110 and 0130

SA 1270 - DIGITAL STUDIO: IMAGING

Minimum Credits: 3
Maximum Credits: 3
Digital Studio: Imaging is a studio designed to immerse students in the investigation of digital art practices. Emphasis will be on the history and aesthetics of art and digital technology, including screen-based imaging practices, creative coding, and digital fabrication. Throughout the course, you will acquire and enhance technical skills, but the emphasis will be on the use of the computer as an art-making tool for your creative expression. Thoughtfulness, experimentation and curiosity is encouraged.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110 and 0180

SA 1280 - DIGITAL STUDIO: PHOTOGRAPHY 2

Minimum Credits: 3
Maximum Credits: 3
Digital Studio: Photography 2 is centered around creating photographic images and an advanced inquiry into contemporary photographic practices and discourse. The course builds on the knowledge, skills, and ideas practiced in Digital Studio: Photography 1 while introducing advanced shooting techniques and an in-depth exploration of digital printing and modes of presentation. Early shooting exercises will ask you to experiment with different ways of seeing and thinking about image making and to discover uncharted photographic territoryâ??both literally and psychologically. You will be expected to create new images weekly, generating contact sheets and prints on a regular basis. The second half of the semester will give you the opportunity to develop a final project where content and form is determined by your personal interests.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SA 0110 and SA 0180

SA 1320 - PAINTING STUDIO: PROJECTS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Requirements: PREQ: SA 1220

SA 1330 - DRAWING STUDIO: PROJECTS

Minimum Credits: 3
Maximum Credits: 3
Drawing Studio: Projects is the third level drawing class for studio arts majors. The course builds on and expands on the foundation of drawing as an expressive and conceptual practice explored in Drawing Studio 2. The emphasis is on individual student drawing-based projects. The first part of the semester includes project assignments where students respond to open-ended prompts. During the second part of the semester students develop an ambitious body of work that involves drawing as a broadly defined discipline as it is situated in contemporary practice. Student work may take many forms which might include, but are not limited to: drawings on paper; installation or drawing in space; mapping; digitally produced drawing; comics or other narrative series; or time-based works such as artist books.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 1230
Course Attributes: Capstone Course

SA 1340 - SCULPTURE STUDIO: PROJECTS

Minimum Credits: 3
Maximum Credits: 3
Environmental art is grounded in interrelationships. These connections include not only physical and biological pathways but also cultural, political and historical aspects of any ecological system. This course focuses on the creation of metaphoric and functional artworks that reveal ecological consideration; these artistic gestures serve to enact change and as connection for the community.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 1240
Course Attributes: Capstone Course

SA 1345 - SCULPTURE STUDIO: INSTALLATION

Minimum Credits: 3
Maximum Credits: 3
This is an advanced sculpture course examining site specific and installation works as strategies in contemporary art. Continually challenged by newly revised and emerging roles in the art world and society at large, the purpose of this studio course is to provide a forum for the discussion and exploration of issues playing a role in the contemporary critical debate.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 1240

SA 1365 - PRINT STUDIO: SCREENPRINT

Minimum Credits: 3
Maximum Credits: 3
This course approaches screenprinting as a medium of artistic expression. Basic screenprinting techniques will be covered, from image generation and screen preparation to the use of screenprinting as a creative outlet. Students will learn the use of basic equipment, printing approaches, papers, a variety of stenciling processes, and photographic and computer techniques to create marks, values, and textures. As the semester progresses, students will gain an awareness of the creative and expressive possibilities of screenprinting and be expected to develop an increasingly complex body of work through their personal vocabulary with the media which may include installation and sculpture.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110 and 0120 and 0130

SA 1370 - PREPARATION AND PRACTICE IN THE VISUAL ARTS

Minimum Credits: 3
Maximum Credits: 3

This is an upper-level writing course that is required for Studio Arts majors and may be taken by minors. Conducted in a seminar format, the course will inspect the wide range of career options in, and related to, the visual arts. Course topics and visitors will offer survival skills for maintaining a visual art practice, while course writings support preparations for professional opportunities.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110 and 0120 and 0130 and 0140; PLAN: Studio Arts (BA); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

SA 1380 - DIGITAL STUDIO: VIDEO

Minimum Credits: 3
Maximum Credits: 3
This is an advanced studio designed for students to intensely experiment and explore the moving digital image in an art context. Students will explore the concepts and skills involved in working with digital video, from pre to post-production. Each student will propose and undertake a final, self-designed project during the final four weeks of the term. Major effort, time, research, imagination, productivity, and involvement are expected throughout the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (SA 0110 and 0180) or ENGFLM 0590 or FILMST 0001

SA 1385 - DIGITAL STUDIO: ANIMATION

Minimum Credits: 3
Maximum Credits: 3
Digital Studio: Animation will introduce the concepts and skills involved in working with 2D digital animation - from pre to post-production. Each student will propose and undertake a final, self-designed project during the final four weeks of the term. Major effort, time, imagination, productivity, and involvement are expected throughout the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: (SA 0110 and 0180) or ENGFLM 0590 or FILMST 0001 or FMST 0800

SA 1420 - COLOR

Minimum Credits: 3
Maximum Credits: 3
This course examines color theory and perception. Various formal color systems and theories are explored. A primary objective is to clarify the relationship between perception, color as light, and color as material, such as paints. Color harmonies, light and shadow, color-form relationships, and investigation of color in human environments and as found in nature are some of the topics involved in the class projects. This course provides an opportunity to explore color interaction in a variety of media and situations.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110; PLAN: Studio Arts (BA)

SA 1430 - DRAWING STUDIO: PERSPECTIVE

Minimum Credits: 3
Maximum Credits: 3
This course is designed to provide students with a thorough understanding of linear perspective and the role it plays in the development of a drawing. The focus is on how these conventions work and the role they play in developing the structural integrity of both form and space. The class will explore how to set up everything from simple perspective drawings to more complex perspectival compositions. Drawings done throughout the term will ultimately be edited and compiled into a bound text to be used as a reference guide for future studies.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0130 and (SA 0110 or ARC 0201); PLAN: Studio Arts (BA) or Architectural Studies (BA)

SA 1440 - SCULPTURE - FIGURE AND PORTRAIT

Minimum Credits: 3
Maximum Credits: 3
This course specializes in the study of the human form and the application of that study in portraiture. Close analysis of skeletal and muscle structure provides a basis for development of a life-size portrait modeled in clay. Modeling techniques are stressed. Interpretation of the subject is encouraged with the expectation of achieving likeness. This course also provides experience in plaster mold making and plaster casting procedures which are employed in the reproduction of the clay original.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0140; PLAN: Studio Arts (BA)

SA 1450 - PAINTING STUDIO: FIGURE

Minimum Credits: 3
Maximum Credits: 3
The purpose of this course is to develop skills in the representation of the human form using a variety of painting strategies. The figure will be examined using direct observation of live models and also by employing other sources such as: photography, film, and digital images. Through lecture and critique the class will study and apply concepts that focus on a variety of roles the figure plays in personal, social, and art historical contexts.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0120 and 0130

SA 1504 - DIRECTED STUDY: STUDIO

Minimum Credits: 3
Maximum Credits: 3
Directed study is a course for art majors to promote concentrated individual development in students who have demonstrated exceptional ability in studio courses.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

SA 1542 - WYOMING FIELD STUDY

Minimum Credits: 3
Maximum Credits: 3
This course is a directed study-like elective for Studio Arts majors. The field study is situated in Rock River, Wyoming between a 1930s motor lodge as primary residence, a 1919 bank building as makeshift studio, and the University's 4,000 acre Spring Creek Preserve. Students interact with others simultaneously enrolled in the Paleoecology field study on the preserve exploring the landscape, flora and fauna, and gaining greater historical and geologic context while absorbing impressions for their creative work - the group camps at the preserve along with the science group at least two nights. Offering a complete focus on creative work within a community of others engaged in the same pursuits, students are fully engaged in their work approximately eight hours per day. Spontaneous and planned critiques, guest artists, and local field trips offer additional insights. A mid-field study trip to Utah offers a new landscape with the exploration of two, land-art works in more remote locales. The course culminates with presentations to the Paleoecology group regarding creative work and Wyoming influences. A journal, artist statement, and reflective final paper are submitted upon return to Pittsburgh.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

SA 1550 - DIRECTED STUDY-PAINTING

Minimum Credits: 3
Maximum Credits: 3
Directed study is a course for art majors to promote concentrated individual development in students who have demonstrated exceptional ability in painting.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

SA 1570 - DIRECTED STUDY-DIGITAL

Minimum Credits: 3
Maximum Credits: 3
Directed study is a course for art majors to promote concentrated individual development in students who have demonstrated exceptional ability in electronic media.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

SA 1600 - SENIOR SEMINAR

Minimum Credits: 3
Maximum Credits: 3
Senior Seminar is a course that develops critical skills necessary to take your work to the next level. Throughout the course you will develop a body of work, engage in robust discussions about contemporary issues and critique your projects. Finally, you will collaborate to create a pop-up exhibition to present your work. Additionally, students will spend time off-campus meeting with artists and exploring art in the Greater Pittsburgh region.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PLAN: Studio Arts; LVL: Senior

SA 1604 - SENIOR EXHIBITION

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN:Studio Arts; LEVEL: Senior

SA 1800 - SPECIAL TOPICS IN STUDIO ARTS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: SA 0110 and any 100-level SA course; PLAN: Studio Arts Majors and Minors

SA 1900 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
An internship is an elective which provides the opportunity for a studio arts major to obtain practical experience through on-the-job training in an art-related field. The candidate makes such arrangements for an internship under the supervision of a faculty sponsor.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

SA 1902 - DIRECTED RESEARCH

Minimum Credits: 1
Maximum Credits: 3
Students can register for 1-3 credits of Directed Research with a faculty mentor.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

SA 1904 - UNDERGRADUATE TEACHING ASSISTANTSHIP

Minimum Credits: 1
Maximum Credits: 3
This course partners advanced studio arts majors with a faculty member as a teaching assistant in a current departmental course. The partnership is intended to offer further experience to dedicated students exploring a particular media with mentorship in studio management and an introduction to teaching, will enhance the course by offering enrolled students additional support and access for skill development and questions throughout the term, and will offer faculty valuable studio management and assistance in working with students.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit
Course Attributes: Capstone Course

Supply Chain Management

BUSSCM 1720 - OPERATIONS MANAGEMENT INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The operations management internship provides business credits for project assignments that augment a professional business environment work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

BUSSCM 1725 - GLOBAL SUPPLY NETWORKS AND MANUFACTURING CULTURES IN LATIN AMERICA

Minimum Credits: 3
Maximum Credits: 3
The course provides students with the fundamentals of international supply chain methods with a special focus on Latin America and Uruguay. It will feature a 2-week study visit to Uruguay where students can place their understanding of those concepts within a cultural context. The course involves significant teamwork and allows students to complete an in-depth analysis of the global supply networks and manufacturing culture in Latin America with Uruguay as a reference point.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSSCM 1730 - MANAGING GLOBAL SUPPLY CHAINS

Minimum Credits: 3
Maximum Credits: 3
Supply chain management explores the management of the flow of materials, information, and funds through the network of suppliers, manufacturers, distributors, retailers, and customers. Using the methodologies of optimization and simulation, where applicable, this course covers topics in distribution network design, inventory management, procurement and outsourcing, revenue management, and channel coordination. For marketing majors, this course counts as a marketing elective.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSQOM 0050 and BUSQOM 1070 (MIN GRADE 'C') and STAT 1100; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management and Undeclared CBA Majors

BUSSCM 1740 - PURCHASING & SUPPLY MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Purchasing and supply management play an essential role in the ability of the firm to operate efficiently and be competitive in the contemporary global business environment. Included in these processes are activities involved in identifying potential suppliers, creating relationships with selected

suppliers, obtaining the needed materials in the most efficient quantities at the highest quality levels, and developing strategies designed to ensure an uninterrupted flow of goods and materials. Purchasing is increasingly a strategic activity which impacts all areas of the firm, including product design, information system design, e-commerce activities, manufacturing planning and control, inventory management, human resource development, financial planning, forecasting, sales, and quality management. The objective of this course is to make students aware of the demands placed upon purchasing professionals, and to understand the impact of purchasing on the competitive success and profitability of the firm. They must also have an understanding of legal and ethical considerations which affect purchasing decision-making.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSQOM 0050 and BUSQOM 1070 (MIN GRADE 'C') and STAT 1100; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management and Undeclared CBA Majors

BUSSCM 1750 - REVENUE MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Increasingly, due to shortening product life cycles and capital-intensive capacity decisions, companies are being forced to place greater emphasis on managing constrained, but perishable inventory and capacity. Examples include the transportation industry (encompassing airlines, shipping, car rentals, and trucking), the hotel industry, the entertainment and sporting industry, and the retail industry. The underlying managerial issue is complex, but improved decision making can increase a company's revenues and profits. In this course, we study quantity and pricing strategies to improve profitability and the course uses microeconomics, operations research, segmentation, and pricing and forecasting concepts that the students would have learned in their economics, quantitative methods, operations, and marketing classes. The methodologies covered in the course include deterministic and stochastic optimization, forecasting, and statistical estimation. Students are also exposed to commercial revenue management software.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSQOM 0050 and BUSQOM 1070 (MIN GRADE 'C') and (STAT 1000 or 1100); PLAN: Accounting,Finance,General Management,Global Management, Marketing, Business Information Systems,Human Resources Management,Supply Chain ManagementandUndeclared CBA Majors

BUSSCM 1760 - DATA MINING

Minimum Credits: 3
Maximum Credits: 3
Data mining is the process of extracting useful information and knowledge from a set of data. Mining is typically done on data sets too large to be analyzed by hand, but the same techniques are applicable to small, complex data. This course is an introduction to the most popular methods used in managerial data mining, and provides experience in using commercial software to explore real data sets. Models considered include those from statistics, machine learning, and artificial intelligence, such as discriminate analysis, logistic regression, clustering, neural nets, tree/rule induction, and association rule modeling. This course is methods-oriented, as opposed to being methodology-oriented, so students learn about when and how to use techniques and how to interpret their output rather than the details about how those techniques work. A laptop computer is required.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: STAT 1100 and BUSQOM 1080; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSSCM 1766 - PROJECTS IN SUPPLY CHAIN MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
BUSSCM 1785 connects undergraduate supply chain management students with a partner organization to development/implement specific supply chain/logistics strategies for an on-campus, student-operated business. Topics include: procurement and purchasing, revenue management, supply chain interruptions/disruptions, inventory management, and risk management across sthe supply chain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

BUSSCM 1780 - SIX SIGMA

Minimum Credits: 3
Maximum Credits: 3

Six Sigma is a disciplined, data-driven approach to process improvement aimed at the near-elimination of defects from every product, process, and transaction. Six Sigma utilizes the following five-phase problem-solving methodology known by the acronym DMAIC: 1. Define the projects, the goals, and the deliverables to customers (internal and external). Describe and quantify both the defect and the expected improvement. 2. Measure the current performance of the process. Validate data to make sure it is credible and set the baseline. 3. Analyze and determine the root cause(s) of the defects. Narrow the causal factors to the vital few. 4. Improve the process to eliminate defects. Optimize the vital few and their interrelationships. 5. Control the performance of the process. Lock down the gains. BUSSCM 1780 six sigma is designed to provide the student not only with strong theoretical knowledge of the Six Sigma green belt body of knowledge, but also with practical, hands-on, experience-based learning through the application of Six Sigma tools and techniques via in-class labs.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade
Course Requirements: PREQ: BUSQOM 0050 and 1070; PLAN: Accounting, Finance, General Management, Global Management, Marketing, Business Information Systems, Human Resources Management, Supply Chain Management, Undeclared CBA majors

BUSSCM 1790 - SUPPLY CHAIN MANAGEMENT INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 3
Supply Chain Management Independent Study.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

BUSSCM 1795 - SUPPLY CHAIN MANAGEMENT INTERNSHIP

Minimum Credits: 3
Maximum Credits: 3
The supply chain management internship provides business credits for project assignments that augment a professional supply chain management work experience.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Letter Grade

BUSSCM 1825 - MARITIME SUPPLY CHAIN

Minimum Credits: 3
Maximum Credits: 3
This course provides an overview of the maritime supply chain industry. It examines the advantages and barriers of purchasing internationally, global sourcing, purchasing processes, and maritime logistics. This course will focus on Cyprus's unique positioning in Europe as a maritime supplier, the need for careful supply chain analysis with regard to maritime powers, and the considerations necessary in trading with island nations where geography makes shipping an essential part of economic conditions and constraints.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

Swahili

SWAHIL 0101 - SWAHILI 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patters, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: African Studies, Global Studies

SWAHIL 0102 - SWAHILI 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0501 or AFRCNA 0523 or SWAHIL 0101; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement, Global Studies

SWAHIL 0103 - SWAHILI 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0502 or AFRCNA 0524 or SWAHIL 0102; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement, Global Studies

SWAHIL 0104 - SWAHILI 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0503 or AFRCNA 0525 or SWAHIL 0103; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies, DSAS Second Language General Ed. Requirement, Global Studies

SWAHIL 0105 - SWAHILI 5

Minimum Credits: 3
Maximum Credits: 3
Swahili 5
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0504 or AFRCNA 0526 or SWAHIL 0104; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies, Global Studies

SWAHIL 0106 - SWAHILI 6

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0505 or SWAHIL 0105; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: African Studies, Global Studies

SWAHIL 0107 - SWAHILI 7

Minimum Credits: 3
Maximum Credits: 3

Students in this class will deepen their knowledge of Swahili by delving into Advanced Swahili. They will build advanced conversational proficiency, while simultaneously building advanced knowledge of the discussions of global issues of interest. Writing, listening and reading comprehension skills will be enhanced in light of advanced Swahili. Students will continue to use vocabulary learned throughout previous courses. They will also utilize new vocabulary learned in reading and listening to news items.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0506 or AFRCNA 0526 or SWAHIL 0106; MIN GRADE 'C' FOR ALL LISTED COURSES
Course Attributes: African Studies, Global Studies

SWAHIL 0108 - SWAHILI 8

Minimum Credits: 3
Maximum Credits: 3
Students in this class will work together to achieve near-native fluency in speaking, reading, writing and listening. Students will continue to build on the knowledge gained throughout past Swahili classes in order to deepen their understanding of the complexities of conversation, discussion and understanding Swahili in the context of everyday life and academic knowledge. They will practice to speak extensively on topics of interest, analyzing and offering opinions on various issues. Students will have opportunities to display their prowess through independently carrying out research on topics of interest and global topical issues and presenting their work from the readings.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: SWAHIL 0107; MIN GRADE 'C'
Course Attributes: African Studies, Global Studies

SWAHIL 0111 - INTRODUCTION TO SWAHILI LANGUAGE ABROAD

Minimum Credits: 3
Maximum Credits: 3
This study abroad course will provide a basic introduction to Swahili language for students with no or very little background in Swahili. It does not take the place of SWAHIL 0101 - Swahili 1 taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

SWAHIL 0112 - CONTINUING SWAHILI LANGUAGE ABROAD

Minimum Credits: 3
Maximum Credits: 3
This study abroad course provides students with some background in Swahili to continue their language study. It does not take the place of a regularly sequenced Swahili language course taught on the Pittsburgh campus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

SWAHIL 1615 - SWAHILI COASTAL CULTURE: GATEWAY TO AFRICA

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the Swahili culture, and will serve as a gateway to understanding African culture and society. It explores the social-cultural customs, traditions, values, beliefs and experiences that give a unique identity to the Swahili people of East Africa. The course will draw concrete examples from literature, film, music, social media and other sources of cultural information. Students will examine and discuss different cultural aspects of Swahili people, and will identify the similarities and disparities between the Swahili (African) culture and American or student's own culture. This course may be helpful to people who are planning to travel to East Africa, other parts of Sub-Saharan Africa, or people who want to understand the East African culture and Africa in general.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement

SWAHIL 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

SWAHIL 1905 - UNDERGRADUATE TEACHING ASSISTANT IN SWAHILI

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

SWAHIL 1909 - SPECIAL TOPICS IN SWAHILI

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Swedish

SWE 0101 - SWEDISH 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

SWE 0102 - SWEDISH 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0511 or SWE 0101; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

SWE 0103 - SWEDISH 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0512 or SWE 0102; MIN GRADE: 'C' FOR LISTED COURSES

Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

SWE 0104 - SWEDISH 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0513 or SWE 0103; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

SWE 0105 - SWEDISH 5

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0514 or SWE 0104; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

SWE 0106 - SWEDISH 6

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0515 or SWE 0105; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: European Union Studies, European and Eurasian Studies, Global Studies, Transatlantic Studies, West European Studies

SWE 0107 - SWEDISH 7

Minimum Credits: 3
Maximum Credits: 3
In level 7, we will continue to practice understanding, speaking, reading and writing Swedish, stylistically focusing on adding more formal grammar and lexicon. My goal is to improve your fluency to a point where you feel comfortable living, continuing your studies or working in Sweden. Our textbook readings will be centered around 5 different themes; crime and punishment, social media, holidays, consumerism and networking/job seeking. In addition to the textbook, we will read the novel AndrÃ©es ballongfÃ¤rd. You will be responsible for creating your own vocab lists at this level, as well as keeping a reading journal with thoughts on your readings. We will discuss your readings in class, but now without the guidance of questions and reading packets, etc. from previous courses. The focus will as always be on your speaking skills and we will use a variety of other course materials as well to maximize our speaking activities. With a very low number of students signed up this semester, take advantage of the personalized instruction and the speaking opportunities a class with only a few students offer!
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

SWE 0111 - INTRODUCTION TO SWEDISH LANGUAGE IN SWEDEN

Minimum Credits: 3
Maximum Credits: 3
This study abroad course offers an introduction to the Swedish language together with hands-on experiential learning activities such as role-plays, quizzes, out-of-classroom activities and Swedish language partners. Students that have no previous knowledge of Swedish will learn basic vocabulary, grammar and pronunciation in order to be able to do grocery shopping, order at a cafe, conduct small talk in Swedish, etc. The course also focuses on teaching students culture-specific vocabulary and concepts in order to improve their understanding of Swedish culture. This course is an introductory course only and will not replace SWE 0101 taught at Pitt.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

SWE 0112 - CONTINUING SWEDISH LANGUAGE IN SWEDEN

Minimum Credits: 3
Maximum Credits: 3
This highly conversational course allows intermediate and advanced level students of Swedish to continue their studies by immersing themselves in the language in Sweden. The focus will be on developing fluency in speaking and writing as well as furthering the understanding of Swedish culture. Building on existing skills, we will take advantage of being in-country and utilize authentic materials (popular literature, media, information pamphlets, etc.) and combine it with hands-on experiential learning activities, such as role-plays, interviews and out-of-classroom activities. This course will not replace any higher-level Swedish (3-8) taught at Pitt.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

SWE 1615 - SWEDEN - FROM VIKINGS TO NOW

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Geographic Region General Ed. Requirement, European and Eurasian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., Transatlantic Studies, West European Studies

SWE 1620 - SWEDEN HERE AND NOW - A SOCIETY IN CHANGE

Minimum Credits: 3
Maximum Credits: 3
This course is designed for students who want to experience studying abroad and learn more about modern day Sweden. We will study the traditional culture of this previously homogeneous country and try to understand just how much is changing in Swedish society as it struggles with multiculturalism and integration of its new Swedes. Students will get a first-hand experience of the issues the country is facing trying to accommodate an unprecedented number of asylum seekers and refugees, and the ramifications on society.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

SWE 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

SWE 1905 - UNDERGRADUATE TEACHING ASSISTANT IN SWEDISH

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

SWE 1909 - SPECIAL TOPICS IN SWEDISH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Theatre Arts

THEA 0115 - THE ALEXANDER TECHNIQUE

Minimum Credits: 1
Maximum Credits: 1
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 0375 - INTRODUCTION TO OPERA

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

THEA 0505 - ENJOY PERFORMANCES

Minimum Credits: 3
Maximum Credits: 3
We are always and everywhere performing. We produce plays and inhabit other places and times. We participate in religious rituals. We occupy public and virtual spaces to protest political injustice. We invest significant time, labor, and energy in managing our social identities. And when we work ¿ if we work ¿ we receive performance reviews. This course engages performance as lens for exploring embodiment, representation, identity, and history. Drawing upon the breadth and depth of performance studies as an interdisciplinary field of inquiry over the past half-century, this course will introduce students to performance as both a subject and method of humanistic inquiry. Through lectures, discussions, and performance analysis exercises we will explore what a performance studies perspective enables us to understand anew.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 0800 - INTRODUCTION TO THEATRE ARTS

Minimum Credits: 3
Maximum Credits: 3
This course serves as an introductory theatre class for non-majors, a foundational course for majors and a core course for minors. The purpose of this course is to examine and experience the practice of theatre-how it is created, what it expresses, what it communicates, and the resulting ideas and emotions. Relevant theatre concepts and terms, as well as historical and artistic contexts, will be studied. In addition to analyzing formal dramatic texts, students will develop a theatrical awareness of the world by exploring how theatre exists in everyday life.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 0804 - THEATRE AND COLLABORATION

Minimum Credits: 3
Maximum Credits: 3
The key to achieving a successful theatrical production is effective communication among all theatre artists during the process of development. Emphasis in this course is placed on collaboration, visualization, research, script interpretation, concept development and performance. Students will be exposed to the work of notable artists in each field and explore theatre making from the vantage point of designers, dramaturgs, playwrights, producers, critics, historians, directors and actors. Over the first two weeks, students will gain a broad base of knowledge regarding the roles and responsibilities inherent in any collaborative theatre process. In the ensuing weeks students will explore a number of contemporary artists and devise their own collaborative projects. Students will become theatre makers.
Academic Career: Undergraduate
Course Component: Lecture

Grade Component: Letter Grade
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

THEA 0810 - INTRODUCTION TO DRAMATIC ART

Minimum Credits: 3
Maximum Credits: 3
This course focuses on script analysis (the examination of how a dramatic text is put together). Exploring a diverse range of dramatic forms spanning histories and geographies, we will study how a play and its structural characteristics offer possible meaning on the page and on the stage. What different analytical tools help us interpret a play text or production? How does a play's dramatic structure and historical circumstances inform its visualization and staging in a specific time and space for an intended audience? The course will evaluate written texts as well as live performances.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Literature General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

THEA 0825 - CONTEMPORARY GLOBAL STAGES

Minimum Credits: 3
Maximum Credits: 3
This course covers a specialized topic in Theatre Arts. Topics vary every semester. Current course descriptions can be in the notes section.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 0830 - INTRODUCTION TO PERFORMANCE

Minimum Credits: 3
Maximum Credits: 3
This course is designed to develop the students' awareness of the actor's process and to foster a general sense of theatre as an area of human endeavor. Students will be introduced to basic communication skills, including physical and vocal presence in front of an audience. The course will also develop an introductory level of acting skill through the use of regular warm-ups, theater games, improvisation, and simple scene study. The class will culminate in the performance of a final scene. Scenes will be selected from a diverse range of playwrights and students will examine the political, cultural and social context of each play. The course will also provide an introduction to basic theater terminology, and foster the ability to respond to and reflect on theatrical performances. Each student is required to buy a semester pass and attend university theatre productions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

THEA 0840 - INTRODUCTION TO THEATRE DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course is an introduction to the design of scenery, costumes and lights used in theatre. Class work consists of several design projects focusing on design development, drawing and rendering, and drafting. This course will create an awareness of the role of the designer within the scope of the total collaborative process of theatre production. Students may be required to purchase a semester pass and attend university theatre productions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Creative Work General Ed. Requirement, SCI Polymathic Contexts: Humanistic GE. Req.

THEA 0842 - INTRODUCTION TO STAGECRAFT

Minimum Credits: 3
Maximum Credits: 3
This is a production-oriented course involving the study and application of the process and skills utilized in the realization of theatrical scenery, props, and lighting. This includes standard scenic construction techniques, materials and equipment of the scene shop, an introduction to scenic painting, drafting, properties design and construction, and basic lighting practices. An introduction to basic lighting equipment and stage electrics will also be addressed. This will be emphasized through experience working in the scene shop, on stage, and on department running crews. 45 Hours of work in one of these areas is required for the course.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 0850 - INTRODUCTION TO SHAKESPEARE

Minimum Credits: 3
Maximum Credits: 3
This course introduces the student to Shakespeare as a playwright, that is, a maker of plays for the stage. The objective of this course is to discover how they work on us as an audience. The actual work of the course is close reading of and interaction with the plays, observation and analysis of film and theatrical treatments of Shakespeare's work, as well as examining the cultural and historical context in which these plays were written and have been subsequently produced.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 0880 - THEATRICAL PRODUCTION

Minimum Credits: 1
Maximum Credits: 1
A practical application course which gives the student hands-on experience in university theatre productions in one or more of the following areas: scenery/props, costume, lighting, sound, and/or stage management. The goal is to expand the student's knowledge and understanding of production processes through team participation in the presenting of a full production. A student must complete at least 45 hours of work in an assigned area to receive 1 credit. Students must usher for 2 performances during the semester enrolled. Note: this course is offered by appointment.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

THEA 1023 - FRENCH THEATRICAL WORKSHOP

Minimum Credits: 3
Maximum Credits: 3
Three plays by Moliere will be read and analysed, and one of the adapted and staged. FR 0055 is a prerequisite.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 1100 - VOICE AND MOVEMENT 1

Minimum Credits: 3
Maximum Credits: 3
This course will explore the anatomy, physiology, and physicality of the human voice and body. The approach will be holistic mind, body, and vocal practice. Techniques learned and practiced will be applied directly to specific performance assignments throughout the semester. Students will begin by examining and identifying healthy, effective, and expressive voice and body use. Students will receive an introduction to the practices of Patsy Rodenburg, Edith Skinner, the Viewpoints, Rudolf Laban, yoga, among others. The work will focus on voice and bodywork as they relate to acting and to any area of life requiring effective communication. Emphasis in text work will be on clarity of thought, physical connection, emotional availability, and clear communication.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1101 - VOICE AND MOVEMENT 2

Minimum Credits: 3
Maximum Credits: 3
This course will build on the practices introduced in Voice & Movement 1 including presence, healthy and expressive vocal use, and effective communication. It will introduce the international phonetic alphabet, accents and dialects. Methods of accent and dialect acquisition will include vocal viewpoints, imagery, phonetics, and physical exercises. Students will research dialects and accents using such sources as: the international dialects of English archive, the visual accent archive, audio and visual recordings. Research and techniques will then be expressed through performances of monologues, scenes and poetry. This course culminates with each student's creation and development of a solo dialect performance.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1102 - ACTING 1

Minimum Credits: 3
Maximum Credits: 3
This course is designed to build foundational acting skills using Stanislavski-based exercises such as those devised by Sanford Meisner, Stella Adler and/or Uta Hagen. These exercises aim to develop the actor's ability to listen and respond truthfully in the moment, be present and connect, work with spontaneity, build concentration, and incite the imagination. Students will learn to craft behavior by working on contemporary text and engaging in improvisational exercises with partners as well as a series of solo projects. Students will also explore given circumstances and actions/objectives while working on audition techniques with a monologue. Students will then apply textual analysis skills and build rehearsal technique by bringing him/her-self to life in a role in a scene. This course is a building block and prerequisite for other performance courses in the theatre department. Students interested in the Theater major or minor or who have theatre experience are encouraged to audition into this course (in lieu of Introduction to Performance).
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: THEA 0830; PROG: School of Arts and Sciences

THEA 1103 - ACTING 2

Minimum Credits: 3
Maximum Credits: 3
Acting II builds on the work of Acting I with a deeper exploration of Realism and Naturalism on stage through textual analysis, scene study, physical exercises, character development, research and solo performance by challenging the student with text and styles that focus on the Modern Era of American and European History. Theoretical work would be complementary, based on the tradition of practitioners like Constantin Stanislavski, Stella Adler, Uta Hagen and Lee Strasberg, deepening a student's understanding of psychological realism.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1104 - ACTING 3

Minimum Credits: 3
Maximum Credits: 3
This course focuses on preparing and presenting roles from classical plays. Using heightened text from diverse textual sources including ancient and modern plays and poetry, students will explore language as it applies to character and intention. Actors will build on their foundational acting craft with advanced vocal and physical acting exercises to enhance character, will develop textual analysis and rehearsal skills, and will apply those techniques to performing scenes (ancient Greek playwrights, Elizabethan playwrights and other lyrical writers). Students will perform three scenes from various historical periods, at least one of which will be from a Shakespearean text. In addition, students will examine the political, cultural and social context of each play.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: THEA 0830 or 1102; PROG: School of Arts and Sciences
Course Attributes: West European Studies

THEA 1110 - DIRECTING 1

Minimum Credits: 3
Maximum Credits: 3
This course intends to discover, explore, and develop the directorial crafts of the student/director. It addresses the theoretical, analytical, and practical skills requisite to the craft of directing plays for the theatre. Plays of the realistic style will be its primary focus, although some discussion may range over other styles and periods in order to provide the proper context for approaching realistic plays. The student's directing ability will be developed through class discussion and exercises, written assignments, outside reading, and the direction of scenes from realistic plays. Students will learn methods to analyze plot, character and theme in scripts as well as techniques to translate that analysis into clear, vivid stage action.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: THEA 0830

THEA 1111 - DIRECTING 2

Minimum Credits: 3
Maximum Credits: 3
This course will entail a study of scene analysis and directing projects from plays of 1860-1980. Will deal with the special demands of different playwrights.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: THEA 1110; PROG: School of Arts and Sciences

THEA 1112 - CONTEMPORARY BLACK FEMALE PLAYWRIGHTS

Minimum Credits: 3
Maximum Credits: 3
This is a lecture and discussion survey course that explores Contemporary Black Female Playwrights from 1990 to the present day. Students will examine these works through historical and cultural context and a contemporary lens. Student written, oral, and introductory performative presentations will analyze play texts, express critical engagement with the literature, and investigate these rich works.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 1226 - STAGECRAFT 2

Minimum Credits: 3
Maximum Credits: 3
This course will entail a study of advanced technical problems through the use of drafting.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1227 - SCENE PAINTING

Minimum Credits: 3
Maximum Credits: 3
This course is a study of scene painting practices for theatre. Students will study the techniques and processes of painting in a studio class atmosphere. Tools and techniques will be demonstrated by the instructor then executed by the student on a large format canvas. Some painting projects may include how to paint marble, foliage, and/or woodgrain.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1229 - STAGE MANAGEMENT 1

Minimum Credits: 3
Maximum Credits: 3
Principles and techniques of stage and production management as applied to professional, educational, and community theatre. Studies will include auditions, rehearsal process and organization; technical and performance process and procedures; production personnel and cost management.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1230 - STAGE LIGHTING 1

Minimum Credits: 3
Maximum Credits: 3
An introduction to Stage Lighting including awareness of light, instrumentation, color theory, texture, control, basic theatrical electricity and artistic design, with an emphasis on the organization of theatrical lighting. This course will reflect the study of lighting as an art form, including design concepts, light plots, artistic elements of theatre, sequential cue relationships, and script analysis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 1231 - STAGE LIGHTING 2

Minimum Credits: 3
Maximum Credits: 3
Using lecture, lab projects, and critique to develop the communication and implementation of ideas in lighting, while also exploring the artistic and conceptual practices of design. Advancing the development of working process consistent with current professional practices in the field of Lighting Design.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1235 - SCENE DESIGN 1

Minimum Credits: 3
Maximum Credits: 3
This is an introduction to scenic design for the theatre exploring creative uses of space to tell stories on stage. Topics covered may include introductions to script analysis, visual research, color theory, basic perspective sketching, model building, and drafting. This course will reflect the current industry practices in scenic design as an art form and may include introductions to contemporary software used in the field.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1240 - COSTUME PRODUCTION AND TECHNOLOGY

Minimum Credits: 3
Maximum Credits: 3
This course is a production-oriented studio course involving the processes and skills utilized in the realization of theatrical costumes. The student will develop an understanding of the costume production process in addition to acquiring the skills necessary in the aid of the construction and completion of theatrical costumes. The student will learn basic hand sewn stitches and fasteners, proper use and operation of the sewing machinery. The student will also learn basic functions of the personnel in the costume shop, health and safety, fabric and textiles, draping, commercial and drafted patterning and costume finishing. Lectures, demonstrations and projects will supplement work done in class. Practical experience is obtained through lab hours which are obtained by working outside of class time in the costume shop on departmental theatre productions (30 hours) or get involved backstage on the wardrobe run crew. These experiences provide the students opportunities to practice skills learned in the classroom.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1245 - STAGE MAKEUP

Minimum Credits: 3
Maximum Credits: 3
This course will offer the student a practical guide to the theory and practice of theatrical makeup and design. The student will learn how to conduct conceptual research, attain a basic skill level in stage makeup application and color selection. Using the student's own face as a canvas, this course will familiarize students with fundamental makeup techniques, equipment, and materials. Through a combination of reading assignments, lectures, supervised demonstrations and practice sessions students will explore the relationship between the theatrical makeup designer, performer and character development thru stage makeup. The course will also introduce the student to entry level specialty/special FX makeup techniques and skills. Professional Makeup kit and textbook are required for this course.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1246 - COSTUME DESIGN 1

Minimum Credits: 3
Maximum Credits: 3
This course is a foundation for the study of the basic principles, practices and techniques of costume design for the stage. Skills and methodologies used in this course will include: how the elements and principles of design relate to and are utilized in costume design; collaboration; script and character analysis; research methods; an introduction to fashion and dress history as it relates to the assigned play; fabric selection; figure drawing and costume rendering techniques.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1338 - MUSICAL THEATRE PERFORMANCE

Minimum Credits: 3
Maximum Credits: 3
This course is designed to introduce students to the foundational elements of the musical theatre performer's process and to examine the use of song in a theatrical context as a mode of human expression. Students will be introduced to the fundamentals of vocal structure and technique as well as physical and vocal presence in front of an audience within the context of specific genres/ style periods of musical theatre. Fundamental acting techniques will be developed in the context of musical theatre practice through the use of regular warm-ups, theater games, improvisation, and study of song texts. Each of the three main units of the course, ensembles, duets and solo songs, will culminate in a public performance of the pieces studied in class. Standard professional practices for musical preparation and auditions will also be addressed and will include a mock audition process at the end of the term. Students will be required to attend a full production of a musical and will develop critical analytical skill through written reflection on that production as well as on their own development throughout the term.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1341 - WORLD THEATRE: 500 BCE TO 1640

Minimum Credits: 3
Maximum Credits: 3
World theatre 500 BC to 1640 investigates histories of theatre and performance (scripts, embodiment, design, audiences, conventions, cultural functions, etc.) Within local and global social, artistic and political contexts, from classical Athens to Edo Japan, colonial Mexico city to Shakespeare's globe. The course focuses on evidence and interpretation as well as historical causation.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

THEA 1342 - WORLD THEATRE: 1640 TO 1890

Minimum Credits: 3
Maximum Credits: 3
This course is the second in a world theatre history sequence designed to explore the development of dramatic forms and theatre practices from the 5th century B.C.E. to the present. In World Theatre: 1640 to 1890 we will discuss the history of theatre arts 'which includes looking at drama, design, performance traditions and audiences--from the comedies of Restoration England to emerging realism of Buchner, Zola and Ibsen. Framed by questions of documentary interpretation and historical causation, the course will analyze the larger contexts of theatrical events, including social and political history, as well as the development of non-theatrical art forms. In addition, we will discuss some contemporary scholarship examining these theatrical events.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Historical Analysis General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS The Arts General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., SCI Polymathic Contexts: Soc/Behav. GE. Req., West European Studies

THEA 1343 - WORLD THEATRE: 1890-Present

Minimum Credits: 3
Maximum Credits: 3
This is the third in a world theatre history sequence designed to explore the development of dramatic forms and theatre practices from the 5th century B.C.E. To 1970. In world theatre: 1890 to Present, we will discuss the history of the theatrical arts which includes looking at drama, design, performance traditions and audiences from the late dramas of Ibsen to the plays of Beckett and Pinter. Framed by questions of documentary interpretation and historical causation, the course will analyze the larger contexts of theatrical events, including social and political history, as well as the development of non-theatrical art forms. Our focus will be on Western theatre with occasional references to non-Western forms of performance and production. In addition, we will discuss some contemporary scholarship examining these theatrical events.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LVL : So, Jr, or Sr; PROG: School of Arts and Sciences
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Literature General Ed. Requirement, DSAS The Arts General Ed. Requirement, SCI Polymathic Contexts: Global&Cross Cul GE. Req., SCI Polymathic Contexts: Humanistic GE. Req., West European Studies

THEA 1360 - THEATRE CRITICISM

Minimum Credits: 3
Maximum Credits: 3
A practical course in the craft of theatre criticism. The class attends local theatrical productions and writes weekly reviews. Course is designed to develop skills in interpretation of the theatrical art, in understanding of how the play operates in the theatre, and in creative writing. Each student receives individual attention to interpretation problems.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

THEA 1361 - FORMS OF JAPANESE THEATRE

Minimum Credits: 3
Maximum Credits: 3
This course provides a survey of various major forms of Japanese theatre using English language materials. Students will have access t0 relatively ancient forms of Japanese theatre such as kagura and noh, kabuki drama and the bunraku puppet theatre through film and videocassette. The modern and avant-garde theatre are also accessible through translation and videocassette material.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

THEA 1365 - PLAYWRITING 1

Minimum Credits: 3
Maximum Credits: 3
This is a beginning course in the craft of playwriting. Students will read eight outside plays, will write seven scripts--the last of which is a one-act--and will critique, read aloud, and discuss the work of others in the class. Seminar/workshop style. Attendance is mandatory. Recommended: two courses from among the following three areas performance, dramatic literature, creative writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Writing Requirement Course

THEA 1366 - PLAYWRITING 2

Minimum Credits: 3
Maximum Credits: 3
Playwriting II advances beyond and builds upon the craft exercises and 20 page one acts of Playwriting I to workshop students' ongoing projects. This work might take the form of a brace or trio of one acts, an hour long portion of a full length play, or other projects to be approved by the instructor. Workshop method. Revision required. This course fulfills the W requirement.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: THEA 1365 or ENGWRT 1650; PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Writing Requirement Course

THEA 1390 - NEW PLAY PRACTICUM

Minimum Credits: 3
Maximum Credits: 3
The New Play Practicum is an advanced course designed for theatre artists (playwrights, directors, actors, mainly though there is room for stage management duties) to try the new scripts produced by students in Playwriting 2 and in some cases from Playwriting 1. The scripts will be assigned in class, table-workshopped at first, and then assigned to teams. Most rehearsals will take place outside of class with the aim of presenting seated readings or staged readings as we can in lunchtime venues throughout the term. Teamwork is key. Each student will have several practical

assignments; written assignments will be tailored to each student's needs.
Academic Career: Undergraduate
Course Component: Practicum
Grade Component: LG/SNC Elective Basis

THEA 1391 - SPECIAL TOPICS: THEATRE DESIGN

Minimum Credits: 3
Maximum Credits: 3
This course covers a specialized topic in Theatre Arts. Topics vary every semester. Current course descriptions can be found in the notes section.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1392 - SPECIAL TOPICS IN PERFORMANCE

Minimum Credits: 3
Maximum Credits: 3
This course covers a specialized topic in Theatre Arts. Topics vary every semester. Current course descriptions can be found in the notes section.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

THEA 1393 - THEATRE AND THE BLACK LIVES MATTER MOVEMENT

Minimum Credits: 3
Maximum Credits: 3
We will collectively read contemporary theatrical, political, theoretical and sociological works that engage with race in the United States, Black Lives Matter, white silence, and ally capacity building. Some of us may be just learning how to talk about the above; some of us may live it daily. Theatrical pieces, plays and performance, function as the spine for our work, around which contextual critical and historical works will coalesce. We will also actively engage with journalistic and social media, as well as films, music and dance, both in Pittsburgh and beyond. The reading and viewing materials in the course are inspired by American Theatre Magazine's, Ferguson Theatre Syllabus, and Prof. Frank Leon Roberts, (NYU Gallatin) Black Lives Matter Movement syllabus.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 1401 - BUSINESS MANAGEMENT

Minimum Credits: 3
Maximum Credits: 3
Career development for performers. The aim of this course is to introduce theatrical performers to the resources and opportunities available in theatre professions, related fields, and continuing education. The objectives are to assist the student in identifying academic and career goals and developing strategies for achieving a successful process. Performers will develop audition material, resumes, headshots and related materials necessary for the successful attainment of their career objectives. In addition, students will be asked to think in a larger context anticipating long range planning to consider
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

THEA 1480 - DIRECTED PROJECT SCENERY/PROPS

Minimum Credits: 1
Maximum Credits: 3
Students will work directly with the scenic faculty and staff on department productions on either theoretical or practical projects.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

THEA 1481 - DIRECTED PROJECT COSTUME/MAKEUP

Minimum Credits: 1
Maximum Credits: 3
Students will work directly with the costume faculty and staff on department productions on either theoretical or practical projects.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

THEA 1482 - DIRECTED PROJECT LIGHTING/SOUND

Minimum Credits: 1
Maximum Credits: 3
Students will work directly with the lighting/sound faculty and staff on department productions on either theoretical or practical projects.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

THEA 1483 - DIRECTED PROJECT DIRECTING/PERF

Minimum Credits: 1
Maximum Credits: 3
This course will entail a study of acting and directing, concentrating on the problems and techniques of the realistic/naturalistic styles and other 20th century correlatives.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

THEA 1484 - DIRECTED PROJECT BUSINESS MGT

Minimum Credits: 1
Maximum Credits: 3
Students will work directly with the design and tech faculty and staff on department productions on either theoretical or practical projects.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

THEA 1485 - DIRECTED PROJECT STAGE MANAGEMENT

Minimum Credits: 1
Maximum Credits: 3
Students will work directly with the stage management faculty and staff on departmental productions on either theoretical or practical projects.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

THEA 1486 - DIRECTED PROJECT DRAMATURGY

Minimum Credits: 1
Maximum Credits: 3
This course involves studying the practice and theory of dramaturgy under the direct supervision of a faculty member. Depending on the student's area of interest and experience, the course may focus on dramaturgy at the introductory level or a more specialized dramaturgy project.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade
Course Attributes: Capstone Course

THEA 1487 - DIRECTED PROJECT UNDERGRAD TEACHING ASSISTANT

Minimum Credits: 1
Maximum Credits: 3
Students will work directly with a faculty member as a Teaching Assistant for a course. To be eligible for a T.A. position, students must: be a Theatre Arts Major or Minor, be at least an emerging Junior or farther in their academic career, have completed both THEA 0804 and THEA 0810, be in good academic standing with a GPA of 3.0 or better, and have completed the course in which the TA position is sought, earning a 3.5 or better in the class. This Directed Study can be taken for 1-3 credits depending on the amount of work and class time agreed upon with the instructor of record. Permission from the Director of Undergraduate Studies in the Theatre Department and the faculty member acting as Instructor of Record is required. Please see the Director of Undergraduate Studies in the Theatre Department for more details.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: Letter Grade

THEA 1488 - THEATRE PRODUCTION

Minimum Credits: 1
Maximum Credits: 3
This course will entail participation in the theatre arts department's productions in one of several categories for upper classmen and graduate students.
Academic Career: Undergraduate
Course Component: Credit Laboratory
Grade Component: LG/SNC Elective Basis

THEA 1498 - DIRECTED RESEARCH: THEATRE ARTS

Minimum Credits: 1
Maximum Credits: 6
Independent work on a project in theatre, supervised by a member of the theatre faculty.
Academic Career: Undergraduate
Course Component: Directed Studies
Grade Component: LG/SNC Elective Basis

THEA 1500 - MODERN ACTING

Minimum Credits: 3
Maximum Credits: 3
This course builds students' acting skills and styles. It provides the means through which students may develop or expand their acting abilities through practical work with a variety of scripts, focusing primarily on 20th-century English plays. This course has been designed based upon the technical foundations established by Stanislavky, and requires students to develop acting skills through exercises and methods taken from a mixture of America, European, as well as Russian acting traditions. Such techniques are fundamental to most lessons given at British universities and acting schools and are often used throughout rehearsals in the context of professional productions.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 1501 - SHAKESPEARE ACTING

Minimum Credits: 3
Maximum Credits: 3
In this course students develop a fluency in Shakespeare's rhetorical style through practical study, performing extracts from Shakespeare plays as well as speaking a Sonnet. The course will enable students to place Shakespeare firmly in the context of his own time, as well as in ours. The course gives an introduction to the rules of rhetorical theatre, with particular reference to the role of the iambic pentameter in Shakespeare's plays. Students are shown how to 'work' a line to the point of delivery, through attention to meaning, scansion, stress and breathing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

THEA 1900 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
The terms of the student's independent study will be agreed upon by the instructor and the student.
Academic Career: Undergraduate
Course Component: Independent Study

Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

THEA 1901 - INTERNSHIP

Minimum Credits: 1
Maximum Credits: 6
The location and terms of the student's internship will be agreed upon by the instructor and student.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: LG/SNC Elective Basis
Course Attributes: Capstone Course

THEA 1903 - SEMINAR IN THEATRE ARTS

Minimum Credits: 3
Maximum Credits: 3
This course covers a specialized topic in Theatre Arts. Topics vary every semester. Current course descriptions can be found in the notes section.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Requirements: PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006) *Applies to all WRIT Courses*
Course Attributes: Capstone Course, Writing Requirement Course

Turkish

TURKSH 0101 - TURKISH 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 0102 - TURKISH 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0561 or TURKSH 0101; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 0103 - TURKISH 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to reading as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.
Academic Career: Undergraduate

Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: LING 0562 or TURKSH 0102; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 0104 - TURKISH 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0563 or TURKSH 0103; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 0105 - TURKISH 5

Minimum Credits: 3
Maximum Credits: 3
Students in this course will: refine and consolidate their language skills in everyday communicative situations covered in Turkish 1 through 4; expand and build on their language skills in more complex communicative situations that require creative and resourceful use of the Turkish Language; learn to express themselves creatively in both spoken and written Turkish at higher levels of articulation with context specific vocabulary, cultural formulas and grammar forms; and, advance their skills in reading and comprehending various types of texts with advance level grammar forms. Focus will be on communicative competence grounded in solid knowledge of grammar, writing, listening and reading comprehension skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0564 or TURKSH 0104; MIN GRADE 'C' FOR ALL LISTED COURSES
Course Attributes: Asian Studies, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 0106 - TURKISH 6

Minimum Credits: 3
Maximum Credits: 3
Students in this course will: refine and consolidate their language skills in everyday communicative situations covered in Turkish 1 through 5; expand and build on their intermediate level language skills in more complex communicative situations that require creative and resourceful use of language skills; learn to express themselves creatively in both spoken and written Turkish at higher levels of articulation with context specific vocabulary, cultural formulas and grammar forms; and advance their skills in reading and comprehending various types of texts with advance level grammar forms. Focus will be on communicative competence grounded in solid knowledge of grammar, writing, listening and reading comprehension skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TURKSH 0105; MIN GRADE 'C'
Course Attributes: Asian Studies, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 0107 - TURKISH 7

Minimum Credits: 3
Maximum Credits: 3
Students in this course will: refine and consolidate their language skills in everyday communicative situations covered in Turkish 1 through 6; expand and build on their language skills in more complex communicative situations that require creative and resourceful use of the Turkish Language; learn to express themselves creatively in both spoken and written Turkish at higher levels of articulation with context specific vocabulary, cultural formulas and grammar forms; and advance their skills in reading and comprehending various types of texts with advance level grammar forms. Focus will be on communicative competence grounded in solid knowledge of grammar, writing, listening and reading comprehension skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: TURKSH 0106; MIN GRADE 'C' FOR ALL LISTED COURSES
Course Attributes: Asian Studies, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 0108 - TURKISH 8

Minimum Credits: 3
Maximum Credits: 3
Students in this course will: refine and consolidate their language skills in everyday communicative situations covered in Turkish 1 through 7; expand and build on their language skills in more complex communicative situations that require creative and resourceful use of the Turkish Language; learn to express themselves creatively in both spoken and written Turkish at higher levels of articulation with context specific vocabulary, cultural formulas and grammar forms; and, advance their skills in reading, comprehending, interpreting, translating and transcribing various types of texts with advance and superior level grammar forms. Focus will be on communicative competence grounded in solid knowledge of grammar, writing, listening and reading comprehension skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: TURKSH 0107; MIN GRADE 'C'
Course Attributes: Asian Studies, European Union Studies, European and Eurasian Studies, Global Studies, Russian & East European Studies

TURKSH 1615 - TURKISH CULTURE AND SOCIETY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, DSAS Geographic Region General Ed. Requirement, European and Eurasian Studies, Russian & East European Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

TURKSH 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

TURKSH 1905 - UNDERGRADUATE TEACHING ASSISTANT IN TURKISH

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

TURKSH 1909 - SPECIAL TOPICS IN TURKISH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

Urban Studies

URBNST 0019 - COVID-19 AND THE CITY

Minimum Credits: 3
Maximum Credits: 3
The global pandemic COVID-19 has disrupted the way we live, and this is especially true for those of us living in metropolitan areas. This

introductory course addresses the current pandemic by exploring the interconnections between urbanization, globalization, and public health. Using lectures, discussions, and guest speakers we will explore what this public health crisis reveals about the way cities are constructed. By looking back at previous global pandemics including the Great Plague, Spanish Flu, and SARs we can evaluate the potential of COVID-19 to change urban life at scales from the global to the local. This course is designed for any Pitt student interested in the interdisciplinary dimensions of the crisis.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

URBNST 0080 - INTRODUCTION TO URBAN STUDIES

Minimum Credits: 3
Maximum Credits: 3
This course serves as the required introduction into the Urban Studies major or as a general course in the social sciences for the non-major. The course explores the problems and potentials of cities by combining the various disciplinary perspectives--economics, Africana studies, history, political science, sociology, and anthropology. As the course is providing the students with the necessary concepts and information to understand cities, the students will be developing their own skills through field trips, debates, group presentations and journal writing.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: Restricted ARTSC UGRD Students
Course Attributes: DSAS Diversity General Ed. Requirement, DSAS Social Science General Ed. Requirement, SCI Diversity General Ed. Requirements, SCI Polymathic Contexts: Soc/Behav. GE. Req., Urban Studies

URBNST 0400 - CRIME, PUNISHMENT, JUSTICE, REINTEGRATION

Minimum Credits: 3
Maximum Credits: 3
This course will focus on the concept of punishment as a response to a criminal act. While in religiously-grounded societies punishment is seen as a retribution for an evil act, tendencies in modernity (and post-modernity) privilege the use of punishment as a tool for social reintegration. With the rise of human rights-based doctrines, the characterization of punishment as retribution has proven to be more and more difficult to justify. Even if sayings such as "paying my debt to society" are still in use, it is becoming more and more evident - especially in a time of mass incarceration - how incarceration as punishment cannot be the only solution. This course exposes students to ideas of justice as a process aimed at reintegrating wrong-doers in society through a path of reconciliation and re-socialization, so that the end of the process will produce fellow citizens rather than ex-felons.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

URBNST 1005 - SPECIAL TOPICS

Minimum Credits: 3
Maximum Credits: 3
This course will entail the exploration of a specific urban topic.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

URBNST 1102 - INTRODUCTION TO GIS

Minimum Credits: 3
Maximum Credits: 3
Geospatial data are digital representations of our physical world. As such, many public policy programs are critically informed by applications of geospatial data. This course will teach students how to acquire, manage, analyze, and visualize spatial data using ArcGIS Desktop. Students will also be introduced to applied data analysis using R. R is powerful, free, and flexible software used in many "big data" application. Assignments, applications, and course discussion will emphasize contemporary issues in public policy. Upon completing this course, students should expect to be proficient in basic GIS analysis and prepared for more advanced statistical coursework.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

URBNST 1104 - APPLIED GIS

Minimum Credits: 3
Maximum Credits: 3
This course provides an introduction to core methods for analyzing geo-spatial data, questions and applications with an emphasis on spatial and cluster analysis of point data using ArcGIS desktop. It will focus on teaching students the principles of GIS through computer-based exercises. Classroom projects will train students in acquiring, constructing, and managing geo-spatial data in order to solve spatially explicit problems. Exercises and projects will be geared toward equipping students with the set of quantitative tools that are relevant to courses taught in the urban studies program, especially courses taken by students in the planning and politics concentrations. This will provide students with the background for pursuing advanced work in urban economic geography, public administration, economic and community development, and regional analysis. However, the core methods presented in this course form the foundation for quantitative work in political science, sociology, and economics as well. This is a self-contained course. Students who have taken courses in Introduction to GIS or Introductory Statistics will find such courses useful, but they are not essential.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

URBNST 1110 - GIS & COMMUNITY DATA

Minimum Credits: 3
Maximum Credits: 3
This course will introduce students to the application of mapping community data to inform decisions at the municipal level. The ability to problem scope, analyze and think critically about complex local issues is critical to the successful application of GIS to decision making by local groups/ actors including Community Development Corporations (CDCs), neighborhood associations, resident associations and planning groups using different types of community data. Throughout the course, students will explore real world scenarios involving real stakeholders using local data and GIS to make decisions and practice planning. Students will be expected to engage with community stakeholders and data about technical and non-technical issues to complete exercise and projects. The course will primarily use ArcGIS Desktop, Microsoft Excel, and Carto online mapping software.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

URBNST 1200 - URBAN STUDIES FIELD RESEARCH SEMINAR

Minimum Credits: 3
Maximum Credits: 3
This course introduces students to the urban studies methodology of "field study". The class will go on field trips to Pittsburgh communities that epitomize current urban problems and issues. Readings and classroom discussions will focus on how to "read" the urban landscape as well as provide background on current urban problems.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

URBNST 1210 - NEIGHBORHOOD, GENTIFICATION, BELONGING AND THE CITY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

URBNST 1300 - URBAN SKILLS SEMINAR

Minimum Credits: 3
Maximum Credits: 3
In this course students will learn and apply a set of basic research and communication skills relevant to work in urban settings. After active participation in the course, students will be able to locate data, analyze in thorough and theory based fashion, and present clearly and persuasively. Skills include defining a research question, questionnaire design and interviewing, finding and interpreting secondary data, using pc based spreadsheet, database and presentation software and participating on a team. Coursework is organized around real world problems.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Capstone Course, Urban Studies

URBNST 1406 - POPULAR CULTURE & IDENTITY IN IRELAND

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

URBNST 1408 - GLOBAL CITY - FLORENCE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

URBNST 1410 - GLOBAL CITY - LONDON

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

URBNST 1414 - GLOBAL CITY - SYDNEY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

URBNST 1416 - ANALYZING & EXPLORING THE GLOBAL CITY: BUENOS AIRES

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Study Abroad

URBNST 1418 - GLOBAL CITY - SHANGHAI

Minimum Credits: 3
Maximum Credits: 3
This three-credit course is designed to encourage students to engage in a critical analysis of the development of modern Shanghai. It is a municipality that already exhibits the key characteristics of many global cities. Students will discuss what that concept means in general terms, and in ways that re specific to Shanghai. Students will explore how this city has been imagined, invented, and transformed by the forces of foreign engagement, industrialization, and globalization. The cityscape and social landscape of Shanghai are the "texts" that student will explore, interpret, and analyze.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

URBNST 1420 - CITY SYMPHONY

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar

Grade Component: Letter Grade
Course Attributes: Study Abroad

URBNST 1422 - URBAN SCAVENGER

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Study Abroad

URBNST 1424 - PITT IN SYDNEY

Minimum Credits: 3
Maximum Credits: 3
This course is taught through the Study Abroad Office as part of the Pitt in Sydney summer program.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: Letter Grade

URBNST 1500 - URBAN RESEARCH SEMINAR

Minimum Credits: 3
Maximum Credits: 3
The Urban Research Seminar focuses the knowledge and skills, which the student has gained through the program, on a particular topic. The specific topic varies from term to term and faculty member to faculty member, but it always concerns an issue of relevance to the immediate Pittsburgh environment. Examples include riverfront development, the impact of Reagan's cutbacks, the redevelopment of East Liberty, etc. To investigate the topic students will review secondary sources as well as collect and analyze their own information through interviews, field trips, surveys, etc.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: URBNST 0080 and 1300PLAN: Urban Studies (BA or BPH); PREQ: ENG 0102 or ENGCMP (0002 or 0006 or 0020 or 0200 or 0203 or 0205 or 0207 or 0208 or 0210 or 0212) or ENGFLM 0210 or FP (0003 or 0006)
Course Attributes: Capstone Course, Writing Requirement Course

URBNST 1502 - FIELD ANALYSIS OF GLOBAL URBANISM

Minimum Credits: 3
Maximum Credits: 3
This course presents University of Pittsburgh students with the opportunity to travel to Singapore and Malaysia for a two-week Urban Studies field course, guided by Pitt faculty. This 3-credit IFTA (integrated Field Trip Abroad) is a base three-credit course that facilitates comparative analysis of urban processes in two strategic Southeast Asian cities. This course is available to all Pitt undergraduates, and does not include any prerequisite courses. The course consists of lectures and site visits to places of significant urban interest in both Singapore and Kuala Lumpur. Students will complete readings and discussions about urban processes in both cities, and will develop a blog and independent reports about these places. The content for this three-credit course will be contained within the two-week field course, and will focus on Asian urbanization, consumption, and sustainable city development.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

URBNST 1504 - ADVANCED INTERNATIONAL FIELD PLACEMENT

Minimum Credits: 3
Maximum Credits: 3
This course presents Urban Studies students with the opportunity to travel to Singapore and Malaysia for a two-week Urban Studies field course, guided by Pitt faculty. This 3-credit IFTA (integrated Field Trip Abroad) is a three-credit course that supplements URBNST 1502, and your domestic research courses (URBNST 1300 & URBNST 1500). Therefore, it is expected that you will have previously completed 1300 and 1500, and be taking URBNST 1502 concurrently with this course. The course focuses upon design and implementation of a pilot research project that attempts a comparative analysis of some aspect of urbanism within Southeast Asia. Students will work in teams to complete this project, under the supervision of Pitt Faculty. This three-credit course will be preceded by five pre-departure meetings, and the research project should in some way focus on one of the course themes.

Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade

URBNST 1608 - URBAN ECONOMIC GEOGRAPHY

Minimum Credits: 3
Maximum Credits: 3
Participants in this course will learn about the evolving forms of metropolitan government and governance in the United States, with a special focus on the post-1992 period. Course units examine the history and contemporary shape of urban politics, and the opportunities and challenges facing local communities during the 21st century. By the end of the course students will be able to appraise how the contemporary landscape of regional governance in the United States is affecting specific cities.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

URBNST 1610 - REMAKING CITIES THROUGH POLICY AND PRACTICE

Minimum Credits: 3
Maximum Credits: 3
Who holds political power in cities across the United States, and how do they use it to remake cities? "Remaking Cities through Policy and Practice" lets you explore the political and community development dynamics of US cities, and builds a toolkit that you will use to evaluate the players and rules of tactical urbanism. During the semester you will meet regional leaders and conduct practical research on the way that neighborhoods are using comprehensive plans and other policy tools to generate economic growth.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis

URBNST 1612 - SOCIAL JUSTICE AND THE CITY

Minimum Credits: 3
Maximum Credits: 3
Social justice and economic justice are popular buzz-words that are closely tied to urban environments: but what do they really mean, and how can we understand them? URBNST 1612 uses critical social geography to interrogate both historical and contemporary social justice movements that claim to protect human rights, fair housing, or to expand definitions of public space and citizenship. Taken together these agendas form a powerful prescription for social action, one often emerging in urban settings. Using a combination of lectures, Concept Mapping exercises, and case studies, we will examine the historical and theoretical context for social justice in the city and then evaluate different geographies of social change. By the end of the course students will be able to use a critical perspective to understand how the rhetoric of social justice is changing the urban geographies of specific cities worldwide.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Urban Studies

URBNST 1613 - SUSTAINABLE CITIES 1: THEORIES AND CONCEPTS

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Study Abroad

URBNST 1614 - URBAN SUSTAINABILITY

Minimum Credits: 3
Maximum Credits: 3
This course provides a critical introduction to the concept of sustainability in relation to cities in the United States and internationally. We will investigate how the fuzzy concept of sustainability has developed, and look at how principles of urban sustainability are put into practice. In particular, we will look at the Pittsburgh city-region, and draw on examples from Singapore, Auckland (New Zealand), and Tianjin (China). In particular, the class will concentrate on how sustainability is embedded in planning urban structures, organizing for sustainable communities, and

mitigating environmental risks and vulnerability. Students will hear from a variety of professionals engaged in sustainable urbanism, and learn about specific tools used to assess sustainability at different geographic scales.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Urban Studies

URBNST 1615 - SUSTAINABLE CITIES 2: FIELD RESEARCH

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: Letter Grade
Course Attributes: Study Abroad

URBNST 1616 - RENT, BUY OR SQUAT: HOUSING AND PROPERTY IN US CITIES

Minimum Credits: 3
Maximum Credits: 3
Housing is the basic building block of the city. Whether you rent or own, shelter is a basic necessity for urban life, but how does housing work? This survey course explores the changing forms of urban housing in the United States, and introduces you to the people and organizations responsible for housing from developers, bankers and landlords to local, federal, and non-profit agencies.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

URBNST 1700 - INTERNATIONAL URBANISM SEMINAR

Minimum Credits: 3
Maximum Credits: 3
It is undeniable that the world has become integrated through the globalization of social, political, cultural and economic activity. Cities worldwide have been markedly affected by globalization, but in turn have played a role in the process. By utilizing published material, films, slides and the internet, this course will compare the economic, social, political, historical and cultural differences between different global cities as they struggle to survive in the twenty-first century.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: URBNST 0080
Course Attributes: DSAS Cross-Cult. Awareness General Ed. Requirement, Global Studies, SCI Polymathic Contexts: Global&Cross Cul GE. Req.

URBNST 1708 - WORLD URBAN PATTERNS

Minimum Credits: 3
Maximum Credits: 3
On May 23, 2007, for the first time in human history, more of the world's population became urban than rural. This course explores two related aspects of global urbanization: changing patterns of urban growth and urbanization, and similarities and differences in the nature of urban processes at the regional level. This course begins by exploring the causes of urbanization, factors driving urban growth, impacts of globalization, and regional variations in urbanization levels at a variety of scales including the global north and global south. In contrast, the second part of the course focuses on the differences and similarities in the characteristics of the economic, social, demographic, and cultural processes that shape urban places and urban life in different regions of the world. The optics covered include, but are not limited to, residential and commercial gentrification, residential segregation, gates communities, common interest developments, and sustainability.
Academic Career: Undergraduate
Course Component: Seminar
Grade Component: LG/SNC Elective Basis

URBNST 1900 - URBAN FIELD PLACEMENT

Minimum Credits: 3
Maximum Credits: 6
This course gives the Urban Studies major the opportunity to get off the campus and into the community. It allows the student to relate his or her academic training to a real world situation by working in an urban related organization or agency. The student works under the combined supervision

of the agency personnel and the urban studies advisor. The student is required to keep a journal, attend scheduled meetings with other field placement students and write a final reflective paper.
Academic Career: Undergraduate
Course Component: Internship
Grade Component: Satisfactory/No Credit
Course Requirements: PLAN: Urban Studies (BA or BPH)
Course Attributes: Capstone Course, Urban Studies

URBNST 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 6
Individual project administered under the supervision of a faculty member.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade
Course Requirements: PLAN: Urban Studies (BA or BPH)

URBNST 1903 - URBAN STUDIES HONORS THESIS

Minimum Credits: 3
Maximum Credits: 3
This course is only for people who will be writing an honors thesis.
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Letter Grade

Vietnamese

VIET 0101 - VIETNAMESE 1

Minimum Credits: 4
Maximum Credits: 4
The greatest part of the first term will be devoted to the presentation and practice of the basic sound patterns of the language, its fundamental sentence patterns, and sufficient vocabulary to illustrate and practice them. An introduction to the writing system will be offered together with the opportunity to acquire elementary writing and reading skills.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Attributes: Asian Studies, Global Studies

VIET 0102 - VIETNAMESE 2

Minimum Credits: 4
Maximum Credits: 4
At the end of the second term of the first year of study the student should be able to produce all the significant sound patterns of the language, to recognize and use the major grammatical structures within a limited core vocabulary. The student should be able a) to engage in simple conversations with native speakers about a limited number of everyday situations and b) to read and write simple material related to the situations presented.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0581 or VIET 0101; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, Global Studies

VIET 0103 - VIETNAMESE 3

Minimum Credits: 3
Maximum Credits: 3
The first term of the second year will concentrate on the further development of fluency in oral production and the improvement in the student's ability to understand the flow of speech as uttered by a native speaker. Increased attention will be paid to readings as a means of augmenting a recognition vocabulary and writing as a drill and as a means of consolidating and communicating the knowledge gained.

Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0582 or VIET 0102; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, Global Studies

VIET 0104 - VIETNAMESE 4

Minimum Credits: 3
Maximum Credits: 3
At the end of the second term of the second year the student should be able to converse comfortably with a native speaker on a variety of non-specialized subjects. The student will be offered an opportunity to experience and more fully understand the culture of the people who use the language through readings of various types. More complex writing tasks will be expected at this level.
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis
Course Requirements: PREQ: LING 0583 or VIET 0103; MIN GRADE: 'C' FOR LISTED COURSES
Course Attributes: Asian Studies, DSAS Second Language General Ed. Requirement, Global Studies

VIET 1901 - INDEPENDENT STUDY

Minimum Credits: 1
Maximum Credits: 9
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: LG/SNC Elective Basis

VIET 1905 - UNDERGRADUATE TEACHING ASSISTANT IN VIETNAMESE

Minimum Credits: 1
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Independent Study
Grade Component: Satisfactory/No Credit

VIET 1909 - SPECIAL TOPICS IN VIETNAMESE

Minimum Credits: 3
Maximum Credits: 3
Academic Career: Undergraduate
Course Component: Lecture
Grade Component: LG/SNC Elective Basis